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DRILL REGULATIONS
AND
OUTLINES OF FIRST AID
FOR THE
HOSPITAL CORPS
UNITED STATES ARMY

REVISED 1908

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WAR DEPARTMENT

OFFICE OF THE SURGEON GENERAL

DRILL REGULATIONS

AND

OUTLINES OF FIRST AID

FOR THE

HOSPITAL CORPS

UNITED STATES ARMY

REVISED 1908

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WAR DEPARTMENT,
Washington, D. C., February 3, 1908.

The revised system of Drill Regulations for the Hospital Corps, United States Army, has been approved by the President, and is herewith published for the information and government of the Army and for the observance of the Militia of the United States.

With a view to insure uniformity in the Army, all hospital corps exercises and maneuvers not embraced in this system are prohibited, and those herein prescribed will be strictly observed.

By order of the Secretary of War:

J. FRANKLIN BELL,
Major General, Chief of Staff.

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DRILL REGULATIONS AND OUTLINES OF FIRST AID FOR THE HOSPITAL CORPS, U. S. ARMY.[a]

DEFINITIONS.

Alignment.—A straight line upon which several men or bodies of troops are formed, or are to be formed.

Base.—The element on which a movement is regulated.

Center.—The middle point or element of a command.

Column.—A formation in which the elements are placed one behind another.

Deploy.—To extend the front.

Depth.—The space from head to rear of any formation, including the leading and rear elements.

Disposition.—The distribution of the fractions of a body of troops, and the formations and duties assigned to each, for the accomplishment of a desired end.

Distance.—Space in the direction of depth.

Drill.—The exercises and evolutions taught on the drill ground.

Echelon.—A formation in which the subdivisions are placed one behind another, extending beyond and unmasking one another, either wholly or in part.

In battle formation, this term is also employed to designate the different lines. Example: The *first echelon*, the firing line; the *second echelon*, the support.

Element.—A file, squad, platoon, detachment, company, or larger body.

Evolution.—A movement executed by several battalions, or larger units, for the purpose of passing from one formation to another.

Facing distance.—Fourteen inches, i. e., the difference between the front of a man in ranks including his interval, and his depth.

File.—Two men; the front-rank man and the corresponding man of the rear rank. The front-rank man is the *file leader*. A file which has no rear-rank man is a *blank file*. The term "files" applies also to individual men in single-rank formation.

File closers.—Officers and noncommissioned officers posted in rear of the line.

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[a] Unless otherwise stated the word "privates" as used in this book applies indifferently to privates first-class and privates.

Flank.—The right or left of a command in line or column; also, the element on the right or left of a line.

In speaking of the enemy one says, "his right flank," "his left wing," to indicate the flank or wing which the enemy would so designate.

Flank attack.—A movement made against the enemy's flank.

Flankers.—Men so posted or marched as to protect the flank of a column.

Flank march.—A march, whatever the formation, by which troops move along the front of the enemy's position.

Formation.—Arrangement of the elements of a command. The placing of all fractions in their order in line, in column, or for battle.

Front.—The space, in width, occupied by a command, either in line or column.

Front also denotes the direction of the enemy.

Guide.—An officer, noncommissioned officer, or private, upon whom the command or fraction thereof regulates its march.

Head.—The leading element of a column.

Interval.—Space between elements of the same line.

Left.—The left extremity or element of a body of troops.

Line.—A formation in which the different elements are abreast of each other.

Maneuver.—A movement made according to the nature of the ground with reference to the position and movements of the enemy.

Order, close.—The normal formation in which soldiers are regularly arranged in line or column.

Order, extended.—The formation in which the soldiers, or the subdivisions, or both, are separated by intervals greater than in close order.

Pace.—Thirty inches; the length of the full step in quick time.

Ploy.—To diminish front.

Point of rest.—The point at which a formation begins.

Rank.—A line of men placed side by side.

Right.—The right extremity or element of a body of troops.

Scouts.—Men detailed to precede a command on the march and when forming for battle, to gather and report information concerning the enemy and the nature of the ground.

Tactics.—The art of handling troops in the presence of the enemy.

Turning movement.—An extended movement around the enemy's flank for the purpose of threatening or attacking his flank or rear.

Wing.—The portion of a command from the center to the flank; the battalion is the smallest body which is divided into wings.

GENERAL PRINCIPLES.

1. The interval between men in a rank is 4 inches; the distance between ranks is 40 inches in both line and column.

The allowance for the front of a man is taken at about 26 inches, including the interval; the depth, about 12 inches.

To secure uniformity of interval between files, when falling in and in alignments, each man places the palm of the left hand upon the hip, fingers pointing downward. In the first case the hand is dropped by the side when the man next on the left has his interval; in the second case, at the command *front*.

2. Distance is measured from the back of the man in front to the breast of the man in rear.

The distance between subdivisions in column is measured from guide to guide.

The distance between commands in column is measured from the rear guide of the preceding to the leading guide of the following command.

3. The interval between men is measured from elbow to elbow; between companies, detachments, squads, etc., from the left elbow of the left man, or guide, of the group on the right to the right elbow of the right man, or guide, of the group on the left.

4. Movements that may be executed toward either flank are explained as toward but one flank, it being necessary to substitute the word "left" for "right," and the reverse, to have the explanation of the corresponding movement toward the other flank.

The commands are given for the execution of the movements toward either flank. The substitute word of the command is placed within parentheses.

5. In movements where the guide may be either right, left, or center, it is indicated in the command thus: *Guide* (*right*, *left*, or *center*).

6. Any movement may be executed either from the halt or when marching, if not otherwise prescribed.

7. Any movement not specially excepted may be executed in double time. If the movement be from the halt, or when marching in quick time, the command *double time* precedes the command *march;* if marching in double time, the command *double time* is omitted.

To hasten the execution of a movement begun in quick time, the command: 1. *Double time*, 2. ***MARCH***, may be given; only those units that have not completed the movement take up the double time.

8. There are two kinds of commands:

The *preparatory* command, such as *forward*, indicates the movement that is to be executed.

The command of *execution*, such as ***MARCH***, ***HALT***, or ***ARMS***, causes the execution.

Preparatory commands are distinguished by *italics*, those of *execution* by ***CAPITALS***.

Where it is not mentioned in the text who gives the commands prescribed, they are to be given by the instructor.

The *preparatory* command should be given at such an interval of time before the command of execution as to admit of its being properly understood; the command of *execution* should be given at the instant the movement is to commence.

The tone of command is animated, distinct, and of a loudness proportioned to the number of men under instruction.

Each *preparatory* command is enunciated distinctly and pronounced in an ascending tone of voice, but always in such a manner that the command of *execution* may be more energetic and elevated.

The command of *execution* is firm in tone and brief.

When giving commands to troops it is usually best to face toward them.

Indifference in giving commands must be avoided, as it leads to laxity in execution. Commands should be given with spirit at all times.

9. To secure uniformity, officers and noncommissioned officers should be practiced in giving commands.

10. The signals should be frequently used in instruction, in order that the officers and men may readily recognize them.

11. In the different schools the posts of the officers and noncommissioned officers are specified, but as instructors they go wherever their presence is necessary. As file closers it is their duty to rectify mistakes and insure steadiness and promptness in the ranks.

12. To revoke a preparatory command, or, being at a halt, to begin anew a movement improperly begun, the instructor commands: ***AS YOU WERE***, at which the movement ceases and the former position is resumed.

13. To stay the execution of a movement, when marching, for the correction of errors, the instructor commands: 1. *In place*, 2. ***HALT***, when all halt and stand fast. To resume the movement he commands: 1. *Resume*, 2. ***MARCH***.

14. The instructor always maintains a military bearing, and by a quiet, firm demeanor sets a proper example to the men.

15. Short and frequent drills are preferable to long ones, which exhaust the attention.

SIGNALS.

16. *Forward.*—Raise the arm until horizontal, extended to the front; at the same time move to the front.

Right oblique.—Raise the arm until horizontal, extended obliquely to the right; at the same time move in that direction.

Left oblique.—Same to the left.

By the right flank.—Raise the arm until horizontal, extended to the right; at the same time move to the right.

By the left flank.—Same to the left.

To the rear.—Face to the rear, raise the arm until horizontal, extended to the rear; at the same time move to the rear.

To change direction to the right (left).—Raise the left (right) arm until horizontal, extended toward the marching flank, carry the arm to the front; at the same time turn and move in the direction to be taken.

Halt.—Raise the arm vertically to its full extent.

Assemble.—Raise the arm vertically to its full extent and slowly describe small horizontal circles.

SCHOOL OF THE SOLDIER.

17. The instructor briefly explains each movement, at first executing it himself if practicable,

He requires the recruits to take by themselves the proper positions and does not touch them for the purpose of correcting them, except when they are unable to correct themselves; he avoids keeping them too long at the same movement, although each should be understood before passing to another. He exacts by degrees the desired position and uniformity.

18. As the instruction progresses the recruits are grouped according to proficiency, in order that all may advance as rapidly as their abilities permit. Those who lack aptitude and quickness are separated from the others and placed under experienced drill masters.

19. A few recruits, usually not exceeding four, are placed in a single rank, facing to the front and about 4 inches apart, arranged according to height, the tallest man on the right.

20. To teach the recruits to assemble, the instructor requires them to place the palm of the left hand upon the hip, below the belt when worn; he then places them on the same line so that the right arm of each man rests lightly against the left elbow of the man next on his right, and then directs the left hands to be replaced by the side.

21. When the recruits have learned how to take their places, the instructor commands: *FALL IN.*

They assemble rapidly, as above prescribed, at attention, each man dropping the left hand as soon as the man next on his left has his interval.

POSITION OF THE SOLDIER, OR ATTENTION.

22. Heels on the same line, and as near each other as the conformation of the man permits.

Feet turned out equally, and forming with each other an angle of about 60 degrees.

Knees straight without stiffness.

Body erect on the hips, inclined a little forward; shoulders square and falling equally.

Arms and hands hanging naturally, backs of the hands outward; little fingers opposite the seams of the trousers; elbows near the body.

Head erect and square to the front; chin slightly drawn in without constraint; eyes straight to the front.

THE RESTS.

23. Being at a halt, the commands are: ***FALL OUT; REST; AT EASE;*** and, 1. *Parade*, 2. ***REST.***

At the command *fall out*, the men may leave the ranks, but remain in the immediate vicinity. They resume their former places at attention, at the command *fall in.*

At the command *rest*, each man keeps one foot in place, but is not required to preserve silence or immobility.

At the command *at ease*, each man keeps one foot in place and preserves silence, but not immobility.

1. *Parade*, 2. ***REST.*** Carry the right foot 6 inches straight to the rear, left knee slightly bent; clasp the hands without constraint, in front of the center of the body, fingers joined, left hand uppermost, left thumb clasped by thumb and forefinger of right hand; preserve silence and steadiness of position.

24. To resume the attention: 1. *Squad*, 2. ***ATTENTION.***

The men take the position of the soldier and fix their attention.

TO DISMISS THE SQUAD.

25. Being in line at a halt: ***DISMISSED.***

EYES RIGHT OR LEFT.

26. 1. *Eyes*, 2. ***RIGHT*** (***LEFT***), 3. ***FRONT.***

At the command, *right*, turn the head to the right so as to bring the left eye in a line about two inches to the right of the center of the body, eyes fixed on the line of eyes of the men in, or supposed to be in, the same rank. At the command *front*, turn the head and eyes to the front.

FACINGS.

27. To the flank: 1. *Right* (*Left*), 2. ***FACE.***

Raise slightly the left heel and right toe, face to the right, turning on the right heel, assisted by a slight pressure on the ball of

the left foot; place the left foot by the side of the right. Left face is executed on the left heel.

"To face in marching" and advance, turn on the ball of either foot and step off with the other foot in the new line of direction; to face in marching without gaining ground in the new direction, turn on the ball of either foot and mark time.

To the rear: 1. *About*, 2. ***FACE.***

Raise slightly the left heel and right toe, face to the rear, turning to the right on the right heel and the ball of the left foot; replace the left foot by the side of the right.

Pl. 1, Par. 28.

Officers execute the about face as follows:

At the command *about*, carry the toe of the right foot about 8 inches to the rear and 3 inches to the left of the left heel without changing the position of the left foot.

At the command *face*, face to the rear, turning to the right on the left heel and right toe; replace the right heel by the side of the left.

Enlisted men out of ranks may use the about face prescribed for officers.

SALUTE WITH THE HAND.

28. 1. *Right* (*Left*) *hand*, 2. ***SALUTE.***

Raise the right hand smartly till the tip of the forefinger touches the lower part of the head-dress (if uncovered, the forehead) above the right eye, thumb and forefingers extended and joined, palm to the left, forearm inclined at about 45 degrees, hand and wrist straight. (***TWO***) Drop the arm smartly by the side.

The salute for officers is the same; the left hand is used only when the right is engaged. Officers and men, when saluting, look toward the person saluted.

SETTING-UP EXERCISES.

29. All soldiers are regularly practiced in the following exercises which may be supplemented by those in authorized calisthenic manuals.

Intervals are taken as in par. 56.

In these exercises it is advisable to remove blouses and caps.

As soon as the exercises are well understood, they may be continued without repeating the commands. For this purpose the instructor gives the commands as prescribed, then adds: *Continue the exercise,* upon which the motions to be repeated are continuously executed until the command *halt.*

At the command *halt,* given at any time, the position of the soldier is resumed.

First exercise.

1. *Arm,* 2. ***EXERCISE,*** 3. ***HEAD,*** 4. ***UP,*** 5. ***DOWN,*** 6. ***RAISE.***

At the command *exercise,* raise the arms laterally until horizontal, palms upward. ***HEAD:*** Raise the arms in a circular direc-

Pl. 2, Par. 29, 1 Ex.

Pl. 3, Par. 29, 1 Ex.

Pl. 4, Par. 29, 1 Ex.

tion over the head, tips of fingers touching top of the head, backs of fingers in contact their full length, thumbs pointing to the rear, elbows pressed back. ***UP:*** Extend the arms upward their full length, palms touching. ***DOWN:*** Force the arms obliquely

back and gradually let them fall by the sides. ***RAISE:*** Raise the arms laterally as prescribed for the second command. Continue by repeating *head, up, down, raise.*

Second exercise.

1. *Arms vertical, palms to the front,* 2. ***RAISE,*** 3. ***DOWN,*** 4. ***UP.***

At the command *raise,* raise the arms laterally from the sides, extended to their full length, till the hands meet above the head, palms to the front, fingers pointing upward, thumbs locked, right thumb in front, shoulders pressed back. ***DOWN:*** Bend over till the hands, if possible, touch the ground, keeping the arms and knees straight. ***UP:*** Straighten the body and swing the extended arms (thumbs locked) to the vertical position. Continue by repeating *down, up.*

Pl. 5, Par. 29, 2 Ex.

Pl. 6, Par. 29, 2 Ex.

Third exercise.

1. *Arm,* 2. ***EXERCISE,*** 3. ***FRONT,*** 4. ***REAR.***

At the command *exercise,* raise the arms laterally until horizontal, palms upward. ***FRONT:*** Swing the extended arms horizontally to the front, palms touching. ***REAR:*** Swing the extended arms well

to the rear, inclining them slightly downward, raising the body upon the toes. Continue by repeating *front, rear*, till the men, if possible, are able to touch the backs of the hands behind the back.

Fourth exercise.

1. *Leg*, 2. ***EXERCISE***, 3. ***UP:***

At the command *exercise*, place the palms of the hands on the hips, fingers to the front, thumbs to the rear, elbows pressed back. ***UP:*** Raise the left leg to the front, bending and elevating the knee as much as possible, leg from knee to instep vertical, toe depressed. ***UP:*** Replace the left foot and raise the right leg as prescribed for the left.

Pl. 7, Par. 29, 3 Ex.

Pl. 8, Par. 29, 4 Ex.

Execute slowly at first, then gradually increase to the cadence of double time. Continue by repeating *up* when the right and left legs are alternately in position.

Fifth exercise.

1. *Leg*, 2. ***EXERCISE***, 3. *Left* (*Right*), 4. ***FORWARD***, 5. ***REAR;*** or, 5. ***GROUND.***

At the command *exercise*, place the hands on the hips, as in fourth exercise. ***FORWARD:*** Move the left leg to the front, knee straight, so as to advance the foot about 15 inches, toe turned out, sole nearly

horizontal, body balanced on right foot. ***REAR:*** Move the leg to the rear, knee straight, toe on a line with the right heel, sole nearly horizontal. Continue by repeating *forward, rear.*

When the recruit has learned to balance himself, the command *forward* is followed by ***GROUND:*** Throw the weight of the body forward by rising on the ball of the right foot, advance and plant the left, left heel 30 inches from the right, and advance the right leg quickly to the position of *forward.* Continue by repeating *ground* when the right and left legs are alternately in the position of *forward.*

Sixth exercise.

1. *Lung,* 2. ***EXERCISE,*** 3. ***INHALE,*** 4. ***EXHALE.***

At the command *exercise,* place the hands on the hips, as in fourth exercise. ***INHALE:*** Inflate the lungs to full capacity by short, successive inhalations through the nose. ***EXHALE:*** Empty the lungs by a continuous exhalation through the mouth. Continue by repeating *inhale, exhale.*

STEPS AND MARCHINGS.

Quick time.

30. The length of the full step in quick time is 30 inches, measured from heel to heel, and the cadence is at the rate of one hundred and twenty steps per minute.

31. To march in quick time: 1. *Forward,* 2. ***MARCH.***

At the command *forward,* throw the weight of the body upon the right leg, left knee straight.

At the command *march,* move the left foot smartly, but without jerk, straight forward 30 inches from the right, measuring from heel to heel, sole near the ground; straighten and turn the knee slightly out; at the same time throw the weight of the body forward and plant the foot without shock, weight of body resting upon it; next, in like manner, advance the right foot and plant it as above; continue the march.

The cadence is at first given slowly, and gradually increased to that of quick time.

The arms hang naturally, the hands moving about 6 inches to the front and 3 inches to the rear of the seam of the trousers.

32. The instructor, when necessary, indicates the cadence of the step by calling *one, two, three, four;* or *left, right,* the instant the left and right foot, respectively, should be planted.

This rule is general.

Double time.

33. The length of the full step in double time is 36 inches; the cadence is at the rate of one hundred and eighty steps per minute.

34. To march in double time: 1. *Forward,* 2. *Double time,* 3. ***MARCH.***

At the command *forward,* throw the weight of the body on the right leg.

At the command *march,* raise the hands until the forearms are horizontal, fingers closed, nails toward the body, elbows to the rear; carry forward the left foot, knee slightly bent and somewhat raised, and plant the foot 36 inches from the right; then execute the same motion with the right foot; continue this alternate movement of the feet, throwing the weight of the body forward and allowing a natural swinging motion to the arms.

If marching in quick time, the command *forward* is omitted. At the command *march,* given as either foot strikes the ground, take one step in quick, and then step off in double time.

To resume the quick time: 1. *Quick time,* 2. ***MARCH.***

At the command *march,* given as either foot strikes the ground, advance and plant the other foot in double time, resume the quick time, dropping the hands by the sides.

Recruits are also exercised in running, the principles being the same as for double time.

When marching in double time and in running, the men breathe as much as possible through the nose, keeping the mouth closed.

Distances of 100 and 180 yards are marked on the drill ground, and noncommissioned officers and men practiced in keeping correct cadence and length of pace in both quick and double time.

35. To arrest the march in quick or double time: 1. *Squad,* 2. ***HALT.***

At the command *halt,* given as either foot strikes the ground, advance and plant the other foot; place the foot in rear by the side of the other. If in double time, drop the hands by the sides.

The halt, while *marking time,* and marching at the *half step, side step,* and *back step,* is executed by the same commands.

To mark time.

36. Being in march: 1. *Mark time,* 2. ***MARCH.***

At the command *march,* given as either foot strikes the ground, advance and plant the other foot; bring up the foot in rear, and continue the cadence by alternately raising and planting each foot on line with the other. The feet are raised about 4 inches from the ground and planted with the same energy as when advancing.

To resume the full step: 1. *Full step,* 2. ***MARCH.***

Half step.

37. Being in march: 1. *Half step*, 2. ***MARCH.***

At the command *march*, given as either foot strikes the ground, take steps of 15 inches.

To resume the full step: 1. *Full step*, 2. ***MARCH.***

The length of the half step in double time is 18 inches.

Side step.

38. Being at a halt: 1. *Right* (*Left*) *step*, 2. ***MARCH.***

Carry and plant the right foot 10 inches to the right; bring the left foot beside it and continue the movement in cadence of quick time.

The side step is used for small intervals only and is not executed in double time.

Back step.

39. Being at a halt: 1. *Backward*, 2. ***MARCH.***

At the command *march*, step back with the left foot 15 inches straight to the rear, then with the right, and so on, the feet alternating.

At the command *halt*, bring back the foot in front to the side of the one in the rear.

The back step is used for short distances only, and it is not executed in double time.

To march by the flank.

40. Being in march: 1. *By the right* (*left*) *flank*, 2. ***MARCH.***

At the command *march*, given as the right foot strikes the ground, advance and plant the left foot, then face to the right in marching, and step off in the new direction with the right foot.

To march to the rear.

41. Being in march: 1. *To the rear*, 2. ***MARCH.***

At the command *march*, given as the right foot strikes the ground, advance and plant the left foot; then, turning on the balls of both feet, face to the right-about and immediately step off with the left foot.

If marching in double time, turn to the right-about, taking four steps in place, keeping the cadence, and then step off with the left foot.

Change step.

42. Being in march: 1. *Change step*, 2. ***MARCH.***

At the command *march*, given as the right foot strikes the ground, advance and plant the left foot; plant the toe of the right foot near the heel of the left and step off with the left foot.

The change on the right foot is similarly executed, the command *march* being given as the left foot strikes the ground.

Covering and marching on points.

43. The instructor selects two points and requires the recruits, in succession, to place themselves upon the prolongation of the straight line through these points and then to march upon them in both quick and double time.

It should be demonstrated to the recruits that they can not march in a straight line without selecting two points in the desired direction and keeping them covered while advancing.

A distant and conspicuous landmark is next selected as a point of direction; the recruit is required to choose two intermediate points in line with the point of direction and to march upon it by covering these points, new points being selected as he advances.

SERVICE KIT.

44. I. Field kit:

(1) Clothing, etc.—.

1 blanket.
1 comb.
1 housewife.
1 poncho, rubber.
1 soap, cake.
1 stockings, pair.
1 toothbrush.
1 towel.

(2) Arms and equipment—

(*a*) For each enlisted man—

1 waist belt.
1 canteen.
1 meat can.
1 cup.
1 knife.
1 fork.
1 spoon.
1 hospital corps knife.
1 hospital corps knife scabbard.
1 shelter tent half (Q. M. D.).
1 shelter tent pole (Q. M. D.).
5 shelter tent pins (Q. M. D.).

(A) When dismounted in addition to (*a*)—

1 haversack.
1 set blanket-roll straps.
2 canteen-haversack straps.

44. I. Field kit—Continued.

(2) Arms and equipment—Continued.

(B) When mounted in addition to (*a*)—

1 canteen strap.
2 spurs.
2 spur straps.

(C) For each noncommissioned officer in addition to (*a*)—

1 emergency case.
1 emergency case strap.

(D) For each private in addition to (*a*)—

1 hospital corps or orderly pouch.

(*b*) Horse equipment—

1 curb bridle complete.
1 watering bridle complete.
1 currycomb.
1 horse brush.
1 halter complete.
1 link.
1 lariat.
1 lariat strap.
1 nose bag.
1 picket pin.
1 saddle, cavalry, complete.
1 saddlebag.
1 saddle blanket.
1 surcingle.
1 fore and 1 hind shoe, fitted.
12 horseshoe nails, pointed.

(3) Rations—

2 field rations, reduced (bacon, hard bread, coffee, sugar, pepper, and salt).
1 iron ration (emergency ration).

II. Surplus kit—

1 drawers, pair.
1 shoes, marching, pair.
2 stockings, pairs.
1 undershirt.

45. The surplus kit is habitually packed in suitable receptacles; 1 package for each group of eight men, plainly marked and carried on a wagon.

When in time of war or field training weather conditions do not require dismounted men to wear overcoats they are to be packed in boxes properly marked, and left under the charge of the quarter-

master's department at the nearest convenient station, to be brought up when needed.

Pouches are worn with all uniforms, suspended from the left shoulder to the rear over right hip, the rear end of the sling passing under the belt. In the field medical officers' orderlies carry the orderly pouch.

The haversack and canteen are suspended from the right shoulder to the rear over the left hip, and the tin cup is carried in the haversack.

The knife is hung from the belt on the left side.

Dismounted men carry their blanket rolls over the shoulder. If required, a revolver is carried at the belt on the right side and the cartridge pouch on the left.

The emergency case for noncommissioned officers is carried in the same manner as the pouch of the privates, but only in the field.

BLANKET ROLL.

46. The "clothing, etc.," of the field kit is packed in the blanket roll, which is carried in the manner used by the infantry. When desirable the rolls may be carried in a wagon. When the soldier is mounted the saddle is packed as described in par. 49.

The roll is packed as follows:

Each man with his shelter half smoothly spread on the ground, with buttons up and triangular end to the front, folds his blanket once across its length and places it upon the shelter half; fold toward the bottom, edge ½ inch from the square end, the same amount of canvas uncovered at the top and bottom. He then places the parts of the pole on the side of the blanket next the square end of the shelter half, near and parallel to the fold, end of pole about 6 inches from the edge of the blanket; nests the pins similarly near the opposite edge of the blanket and distributes the other articles carried in the roll; folds the triangular end and then the exposed portion of the bottom of the shelter half over the blanket.

The two men in each squad roll and fasten first the roll of No. 1 and then of No. 2. The file closers work similarly, two and two. Each pair stands on the folded side, rolls the blanket roll closely and buckles the straps, passing the end of the strap through both keeper and buckle, back over the buckle and under the keeper. With the roll so lying on the ground that the edge of the shelter half can just be seen when looking vertically downward, one end is bent upward and over to meet the other, a clove hitch is taken with the guy rope, first around the end to which it is attached and then around the other end, adjusting the length of rope between hitches to suit the wearer.

METHOD OF PACKING PERSONAL EQUIPMENT ON SADDLE.

To roll the overcoat.

47. Spread the overcoat with the inside down, fold the sleeves square across, the cuff touching at the back seam; turn the tail under about 9 inches, the folded edge perpendicular to the back seam; fold over the front edges of the coat and skirt, to form a rectangle no more than 34 inches across, according to the size of the coat; roll tightly from the collar with the hands and knees, and bring over the whole roll that part of the skirt which was turned under, thus binding the roll.

To roll the bed blanket and shelter tent.

48. The blanket measures 72 by 84 inches.

Spread the shelter tent and turn under one end about 10 inches.

Fold the blanket to three thicknesses across the shorter edge; the fold then measures 24 inches wide; place the blanket thus folded across the middle of the shelter tent, the end of the folded blanket about one inch above the folded edge of the tent; fold the side parts of the tent over the blanket; roll tightly from the exposed end of the blanket with the hands and knees and bring over the whole roll the part of the tent that was turned under, thus binding the roll.

On account of the inelasticity of the canvas it will be found necessary, just before turning over the part which binds the roll, to spread the canvas a little where it folds inside, at the end of the roll.

To pack the saddle.

49. Overcoat rolled as prescribed, and strapped on the pommel; *blanket*, with clothing, etc., of the field kit inside, is rolled in the shelter tent (the roll not to be less than 24, nor more than 28 inches in length, according to bulk); *nosebag* slipped over the roll outside the shelter tent on the near end and the strap buckled over the off end; *lariat* rolled around the picket pin and snapped into the near cantle ring; *canteen* with *cup* on strap attached to off cantle ring; *tin plate* or *meat can*, *knife*, *fork*, and *spoon* in near saddlebag; *curry-comb*, *brush*, and *watering bridle* in off saddlebag.

Rations to be divided so as to equalize the weight in the saddlebags; also extra horseshoes (fitted) and nails (pointed) when on active service and separated from transportation.

For field service, the lariat should be coiled and fastened with a thong to the near cantle ring (passing under the left stirrup strap), the free end snapped into the halter ring.

Generally in field service, especially when the horse is low in flesh, the bed blanket should be folded and placed over the saddle blanket.

SCHOOL OF THE DETACHMENT.

50. The senior medical officer of the detachment is held responsible for the theoretical and practical instruction of the officers, noncommissioned officers, privates first class, and privates when their instruction is not otherwise provided for by Army Regulations and General Orders. He requires the officers and noncommissioned officers to study and recite these regulations so that they can explain thoroughly every movement.

The detachment, when formed, is in single rank, graduated in size, the tallest man on the right.

Companies of instruction may be formed, maneuvered, mustered, and inspected in accordance with Infantry Drill Regulations.

POSTS OF OFFICERS AND NONCOMMISSIONED OFFICERS.

51. The medical officer commanding is three paces in front of the center of the detachment; the junior medical officers, according to rank from right to left, are two paces in rear of the rank, in the line of file closers, and at equal intervals; if only one, he is opposite the center; if two, one is opposite the center of each half of the detachment; if three, one is opposite the center, the others as with two.

The senior noncommissioned officer is two paces in rear of the second file from the right, on the right of the line of file closers.

The second noncommissioned officer is on the right of the rank and is right guide of the detachment.

The third noncommissioned officer is on the left of the rank and is the left guide.

The remaining noncommissioned officers are distributed along the line of file closers from right to left, according to rank.

If necessary, a suitable private may be designated to act as right or left guide.

TO FORM THE DETACHMENT.

52. At the signal for the *assembly*, the senior noncommissioned officer takes his position six paces in front of where the center of the detachment is to be, and facing it, commands:

FALL IN.

The second noncommissioned officer, or a designated private, places himself, facing to the front, where the right of the detachment is to rest, and at such a point that its center will be six paces from and opposite to the senior noncommissioned officer. The men assemble rapidly at attention, securing the proper interval between files as described in par. 20.

The other noncommissioned officers then take their posts.

The senior noncommissioned officer calls the roll, each man answering, "Here," as his name is called.

TO SIZE THE DETACHMENT.

53. The men being in line as described, the senior noncommissioned officer faces them to the right and arranges them according to height, tallest man in front; he then faces them to the left into line. The detachment being sized, habitually forms in the same order.

54. The senior noncommissioned officer commands:

1. *Count*, 2. ***TWOS.***

At the command *twos*, all except the right file execute *eyes right*, and beginning on the right the men count *one, two;* and so on to the left. Each man turns his head and eyes to the front as he counts. The guides do not count. An odd man is ordinarily placed in the line of file closers.

After twos are counted the command is given:

1. *Count*, 2. ***SQUADS.***

At *squads*, the Nos. 2 execute *eyes right*, and, beginning on the right, count in consecutive order 1, 2, 3, 4, 5, etc., until all have counted. Each No. 2 turns his head and eyes to the front as he counts.

The senior noncommissioned officer then faces about, salutes the officer commanding, and reports "*Sir, all present or accounted for*," or the names of the unauthorized absentees, and without command takes his post, passing around the right flank. The officer commanding places himself twelve paces in front of the center of and facing the detachment in time to receive the report of the senior noncommissioned officer, whose salute he returns. The junior medical officers take their posts when the senior noncommissioned officer has reported.

ALIGNMENTS.

55. The officer commanding having received the detachment, commands:

1. *Right* (*Left*), 2. ***DRESS,*** 3. ***FRONT.***

At the command *dress,* the men place the palm of the left hand upon the hip, execute *eyes right,* and dress up to the line; the officer commanding verifies the alignment. At the command *front,* each man turns the head and eyes to the front and drops the left hand by his side.

At each alignment, the officer commanding, before giving his commands, places himself in prolongation of the line, two paces from and facing the flank toward which the dress is made.

In all alignments, excepting of the file closers, the left hand is placed upon the hip, and at *front* dropped to the side. The detachment is aligned whenever necessary.

To take intervals.

56. Being in line at a halt.

1. *To the right* (*left*) *take intervals,* 2. ***MARCH,*** 3. *Detachment,* 4. ***HALT.***

At the first command, the file closers step back to four paces distance from the rank; at the command *march,* all face to the right and the leading man of each rank steps off; the other men step off in succession so as to follow the preceding man at four paces.

At the command *halt,* given when all have their intervals, all halt and face to the front.

To assemble.

1. *To the right* (*left*) *assemble,* 2. ***MARCH.***

The front rank man on the right stands fast, the file closer on the right closes to two paces. The other men face to the right, close by the shortest line and face to the front.

MARCHINGS.

To march in line.

57. Being in line at a halt.

1. *Forward*, 2. *Guide right* (*left*), 3. ***MARCH.***

The men step off, the guide marching straight to the front.

The instructor sees that the men preserve the alignment and the intervals toward the side of the guide. The men yield to pressure from that side and resist pressure from the opposite direction; by slightly shortening or lengthening the step they gradually recover the alignment, and by slightly opening out or closing in they gradually recover the interval, if lost; while habitually keeping the head to the front, they may occasionally glance toward the side of the guide to assure themselves of the alignment and interval, but the head is turned as little as possible for this purpose.

To change the guide:

Guide left (*right*).

To march backward.

58. Being at a halt:

1. *Backward*, 2. *Guide right* (*left*), 3. ***MARCH.***

To march to the rear.

59. Being in march:

1. *To the rear*, 2. ***MARCH***, 3. *Guide right* (*left*).

To march faced to the flank.

60. Being in line at a halt:

1. *Right* (*Left*), 2. ***FACE***, 3. *Forward*, 4. ***MARCH.***

If marching:

1. *By the right* (*left*) *flank*, 2. ***MARCH.***

The leading man is the guide. The other men follow at facing distance.

To halt the detachment:

1. *Detachment*, 2. ***HALT;***

and to face to the front:

3. *Left* (*Right*), 4. ***FACE;***

or, to march again to the front without halting:

1. *By the left* (*right*) *flank*, 2. ***MARCH,*** 3. *Guide right* (*left*).

The oblique march.

61. Being in line:

1. *Right* (*Left*) *oblique*, 2. ***MARCH.***

Each man steps off in a direction 45 degrees to the right of his original front. He preserves his relative position, keeping his shoulders parallel to those of the man next on his right, and so regulates his steps as to make the rank remain parallel or its original front.

At the command *halt*, the men halt, faced to the front.

To resume the original direction:

1. *Forward*, 2. ***MARCH,*** 3. *Guide right* (*left*).

The men half face to the left in marching and then move straight to the front.

At *half step* or *mark time* while obliquing, the oblique march is resumed by the commands:

1. *Full step*, 2. ***MARCH.***

In the oblique march the guide is, without indication, always on the side toward which the oblique is made. On resuming the direct march in line, the guide is announced.

These rules are general.

The column of files obliques by the same commands and means.

To march in double time.

62. Being in line at a halt:

1. *Forward*, 2. *Guide right* (*left*), 3. *Double time*, 4. ***MARCH.***

To pass from quick to double time and the reverse.

63. 1. *Double time*, 2. ***MARCH.***

To resume quick time:

1. *Quick time,* 2. ***MARCH.***

Marching in line, to effect a slight change of direction.

64. The command is:

INCLINE TO THE RIGHT (***LEFT***).

The guide gradually advances the left shoulder and marches in the new direction; all the files advance the left shoulder and conform to the movements of the guide, lengthening or shortening the step, according as the change is toward the side of the guide, or the side opposite.

TURNINGS.

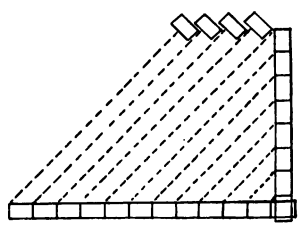
To turn on fixed pivot.

65. Being in line at a halt:

1. *Detachment right* (*left*), 2. ***MARCH,*** 3. *Detachment,* 4. ***HALT;*** or,
3. *Full step,* 4. ***MARCH,*** 5. *Guide right* (*left*).

At the second command, the right guide stands fast; the right file marks time turning to the right in his place; the other men by twice obliquing to the right place themselves successively abreast of the pivot and mark time.

At the third command, the right guide places himself on the right of the rank.



Pl. 9, Par. 65.

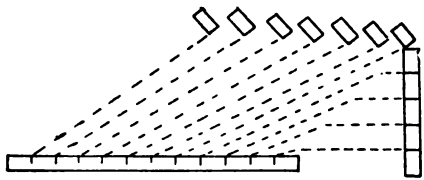
The fourth command is given when the last man arrives in his new position; the command *halt* may be given at any time after the movement begins, only those halt who are in the new position. All align themselves to the right without command.

Being in march, the movement is executed by the same commands and in the same manner; the right guide halts and stands fast at the second command.

To turn on moving pivot.

66. Marching in line:

1. *Right* (*Left*) *turn*, 2. ***MARCH***, 3. *Full step*, 4. ***MARCH***, 5. *Guide right* (*left*).



Pl. 10, Par. 66.

At the second command, the right guide faces to the right in marching and takes the half step; the other men oblique to the right until opposite their places in line, execute a second right oblique and take the half step when abreast of the right guide. All take the full step at the fourth command, which is given when the last man arrives in his new position.

Being at a halt, the movement is executed by the same commands and in the same manner. At the second command, the right guide faces to the right as in marching and steps off, taking the half step.

Right (*Left*) *half turn* is executed in a similar manner. The right guide makes a half change of direction to the right and the other men make quarter changes in obliquing.

Being in line, to form or march in column of twos to the right or left.

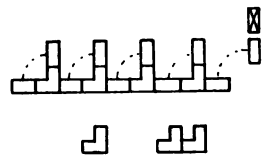
67. 1. *Twos right* (*left*), 2. ***MARCH***, 3. *Detachment*, 4. ***HALT;*** or, 3. *Full step*, 4. ***MARCH***.

Each two executes the right turn on fixed pivot.

The distance between the sets of twos is 40 inches.

The right and left guides place themselves 40 inches in front and rear, respectively, of the left file of the leading and rear

twos; the file closers face to the right and maintain their relative positions.



Pl. 11, Par. 67.

The officer commanding in column of twos and files is by the side of the leading guide on the flank opposite the file closers.

The leading and rear guides in column of twos are, respectively, in front of the leading file, and in rear of the rear file, on the side opposite the file closers.

Privates and musicians, when in the line of file closers, conform to the movements prescribed for the latter.

In all changes by twos from line into column, column into line, or from column of twos to files, or the reverse, and in all turns about by twos, either in line or column, the guides and file closers take their proper places in the most convenient way as soon as practicable after the command *march.*

In column of twos, the dress is toward the side of the guide.

These rules are general.

Marching in column of twos, to change direction.

68. 1. *Column right* (*left*), 2. ***MARCH.***

The leading two executes right turn on moving pivot and takes the full step, without command, when the man on the marching flank is abreast of the pivot. The other twos execute the right turn on moving pivot on the same ground and in the same manner as the leading one. The guides and file closers conform to the movement.

Column half right (*left*) is similarly executed, each two making a right half turn on moving pivot.

To put the column of twos in march and change direction at the same time.

69. 1. *Forward,* 2. *Column right* (*left*); or, 2. *Column half right* (*left*), 3. ***MARCH.***

Executed as in the preceding paragraph; the pivot of the leading two faces to the right, as in marching, and steps off.

Being in line, to form column of twos and change direction.

70. 1. *Twos right (left)*, 2. ***MARCH,*** 3. *Full step, column right (left)*, 4. ***MARCH.***

Execute twos right, and then change direction.

Being in column of twos, to change the file closers from one flank to the other.

71. 1. *File closers on left (right) flank*, 2. ***MARCH.***

At the first command the file closers close in to the flank of the column, and at the command *march* dart through the column. The officer commanding and guides change to their proper positions.

To oblique in column of twos, and to resume the direct march.

72. 1. *Right (Left) oblique*, 2. ***MARCH.***

To resume the direct march:

1. *Forward*, 2. ***MARCH.***

To face or march the column of twos to the rear.

73. 1. *Twos right (left) about*, 2. ***MARCH,*** 3. *Detachment*, 4. ***HALT;*** or, 3. *Full step*, 4. ***MARCH.***

At the second command each two twice executes *twos right;* the man on the marching flank moves at full step and without pause to his position abreast of the pivot. The fourth command is given upon the completion of the about. The file closers face about and take their normal positions in column.

To form line from column of twos.

74. To the right or left:

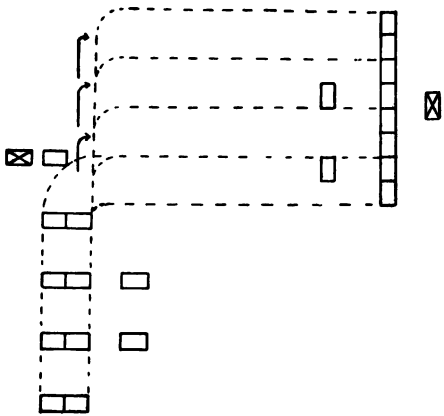
1. *Twos right (left)*, 2. ***MARCH,*** 3. *Detachment*, 4. ***HALT;*** or, 3. *Full step*, 4. ***MARCH,*** 5. *Guide right (left)*.

At the second command each two executes the turn on fixed pivot. If the line be formed toward the side of the file closers, they close

in to the flank of the column at the first command, and at the second command dart through the column.

75. On right or left:

1. *On right (left) into line,* 2. ***MARCH,*** 3. *Detachment,* 4. ***HALT,*** 5. ***FRONT.***



Pl. 12, Par. 75.

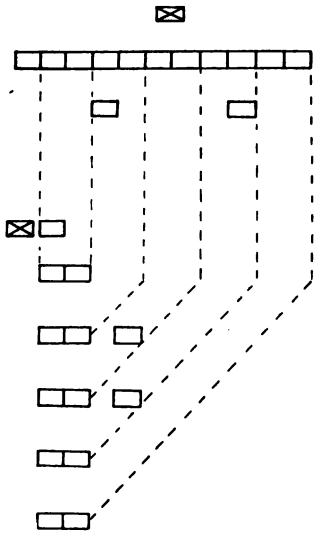
At the command *march* the leading two executes right turn on moving pivot and takes the full step without command when the man on the marching flank is abreast of the pivot; the leading guide places himself on the right of the two.

Each of the other two moves forward until opposite its place in the new line, when it changes direction as explained for the leading two; the rear guide takes his place on the left when the rear two arrives on the line.

At the command *halt,* given when the leading two has advanced detachment distance in the new direction, it halts and dresses to the right; the other twos successively halt and dress upon arriving in line.

The command *front* is given when all are aligned.

If the movement is executed toward the side opposite the file closers, each follows the two nearest him, passing in front of the following two.



Pl. 13, Par. 76.

76. To the front:

Right (*Left*) *front into line*, 2. ***MARCH***, 3. *Detachment*, 4. ***HALT***, 5. ***FRONT***.

At the command *march*, the leading two moves to the front, dressing to the left; the guide in front places himself on its left; the other twos oblique to the right until opposite their places in line, when each marches to the front.

At the command *halt*, given when the leading two has advanced detachment distance, it halts and dresses to the left. The other twos halt and dress to the left upon arriving in line; the rear guide takes his place on the right when the rear two arrives on the line.

The command *front* is given when all are aligned.

If the movement is toward the side of the file closers, they dart through the column as the oblique commences.

If marching in double time, or in quick time and the command be *double time*, the command *guide left* is given immediately after the command *march;* the leading two moves to the front in quick time; the other twos move in double time, each taking the quick time and dressing to the left upon arriving in line.

Being in line, to face or march to the rear.

77. 1. *Twos right* (*left about,*) 2. ***MARCH,*** 3. *Detachment,* 4. ***HALT;*** or, 3. *Full step,* 4. ***MARCH,*** 5. *Guide right* (*left*).

Each two executes the about, par. 73; the file closers dart through the nearest intervals.

78. The detachment at a halt may be moved a few paces to the rear by the commands:

1. *About,* 2. ***FACE,*** 3. *Forward,* 4. *Guide right* (*left*), 5. ***MARCH.***

No other movement is executed until the line is faced to the original front.

Marching in column of twos to form column of files.

79. 1. *Right* (*Left*) *by file,* 2. ***MARCH.***

At the command *march*, the right files move forward; the left files mark time until disengaged, when they oblique to the right in full step and each follows the right file of his two at facing distance; the guides taking the same distance.

A column of twos or files at a halt may be faced to the rear, or flank, and marched a short distance. No other movement is executed until the column is faced to the original front. The officers and file closers face with the column and maintain their relative positions.

Marching in column of files to form column of twos.

80. This movement is always executed away from the file closers.

1. *Twos,* 2. *Left* (*Right*) *front into line,* 3. ***MARCH,*** 4. *Full step,* 5. ***MARCH.***

At the third command, the leading file of each two takes the half step; the rear file of each two obliques to the left in full step until uncovered, moves up abreast of the leading file of his two and takes the half step. At the fifth command all resume the full step.

To dismiss the detachment.

81. Being in line at a halt, the officer commanding directs the senior noncommissioned officer: *Dismiss the detachment*, and returns his salute. The officers fall out; the senior noncommissioned officer salutes, steps three paces to the front and two paces to the right of the detachment, faces to the left, and commands: *Dismissed.*

MOVEMENTS BY PLATOONS.

82. Movements by platoons may be used by large detachments. This formation is often required for hospital corps detachments appearing in parades and reviews, and on the march. If the rank is composed of less than twenty files the division into platoons is usually not necessary.

When platoon movements are to be executed, the senior noncommissioned officer makes the division into platoons immediately after twos and squads are counted. The guides are assigned as follows: The second noncommissioned officer is the right guide of the first platoon, the third noncommissioned officer is the left guide of the second platoon, the fourth noncommissioned officer is the left guide of the first platoon, and the fifth noncommissioned officer is the right guide of the second platoon.

If more than two platoons are formed, the third noncommissioned officer is the left guide of the platoon on the extreme left of the detachment, and the necessary number of noncommissioned officers are posted as guides, according to rank from right to left.

The division is so made that the platoons may be of nearly equal strength. At the formation of the detachment the platoons are numbered consecutively from right to left; these designations are permanent and do not change when, by any movement, the right becomes the left of the line, or the head becomes the rear of the column.

The senior noncommissioned officer always remains with the first platoon; when in line he is in rear of the second file from the outer flank, taking a corresponding position when the platoons unite in column of twos.

In movements by platoons, each chief repeats such preparatory commands as are to be immediately executed by his platoon; the men execute the commands, *march* and *halt*, if applying to their platoons, when given by the commanding officer. Each chief repeats the commands prescribed for him so as to insure execution of the movement by his command at the proper time.

These rules are general.

Being in line, to form or march in column of platoons to the right or left.

83. 1. *Platoons right (left)*, 2. ***MARCH***, 3. *Detachment*, 4. ***HALT;*** or, 3. *Full step*, 4. ***MARCH***, 5. *Guide right (left)*.

Executed by each platoon, the right man of each platoon is the pivot. The left guide of the right platoon places himself on the left of his platoon as soon as practicable. At the first command, each chief of platoon cautions, *Platoon right;* and at the second command takes his post two paces in front of the center of his platoon, passing around the right flank.

At the third command, the right guide of each platoon places himself on the right of the pivot man of his platoon.

The guide of the rear platoon preserves the trace, step, and a distance equal to the front of his platoon.

When a detachment is formed in line of platoons in column of twos, the guides in the line of file closers take their new posts as soon as practicable; when platoons are about to unite in line or in column of twos, guides at the center take their posts in the line of file closers.

In column of platoons, the officer commanding is three paces in front of the chief of the leading platoon.

These rules are general.

The column of platoons is put in march, halted, obliques, and resumes the direct march by the same commands as a detachment in line.

Marching in column of platoons, to change direction.

84. 1. *Column right (left)*, 2. ***MARCH.***

At the first command, the chief of the leading platoon commands: *Right turn.*

At the command *march*, the leading platoon turns to the right on moving pivot; its chief commands:

1. *Full step*, 2. ***MARCH***, on completion of the turn.

The rear platoon marches squarely up to the turning point and changes direction by command of its chief.

Column half right (left) is similarly executed; each chief gives the preparatory command:

Right (Left) half turn.

To put the column of platoons in march and change direction at the same time.

85. 1. *Forward*, 2. *Guide right (left)*, 3. *Column right (left)*; or, 3. *Column half right (left)*, 4. ***MARCH,***

At the third command, the chief of the leading platoon commands:

Right (Right half) turn.

The movement is executed as in the preceding paragraph.

86. In changing direction in column of subdivisions, each chief, on the completion of the movement by his subdivision, announces the guide on the side it was previous to the turn.

This rule is general.

Being in column of platoons, to face or march to the rear.

87. 1. *Twos right (left) about*, 2. ***MARCH,*** 3. *Detachment*, 4. ***HALT;*** or, 3. *Full step*, 4. ***MARCH,*** 5. *Guide right (left)*.

Each set of twos executes the about. If one platoon be smaller than the other, the guide of the rear platoon regains the trace and distance on the march.

To form line from column of platoons.

88. Before forming line to the right or left, or on the right or left, the officer commanding requires the guide of the rear platoon on the flank toward which the movement is to be executed to cover; if marching, he announces the guide on that flank, if not already there.

89. To the right or left:

1. *Platoons right (left)*, 2. ***MARCH,*** 3. *Detachment*, 4. ***HALT;*** or, 3. *Full step*, 4. ***MARCH,*** 5. *Guide right (left)*.

Each platoon executes right turn on fixed pivot.

At the second command, each chief of platoon takes his post in rear of his platoon, passing around its left flank.

90. On right or left:

1. *On right (left) into line,* 2. ***MARCH,*** 3. *Detachment,* 4. ***HALT,*** 5. ***FRONT.***

The chief of the leading platoon commands: *Right turn.* The leading platoon turns to the right on moving pivot.

The command *halt* is given when the leading platoon has advanced detachment distance in the new direction; its chief commands: *Right dress* and passes around the right flank to his post.

The rear platoon marches straight to the front, changes direction by command of its chief, when opposite the right of its place in line, and, when the right file has arrived on the line, is halted by its chief, who also commands: *Right dress,* and passes around the left flank to his post.

The officer commanding verifies the alignment and commands: ***FRONT.***

Being in column of platoons, to march by the flank.

91. 1. *Twos right (left),* 2. ***MARCH,*** 3. *Full step,* 4. ***MARCH,*** 5. *Guide right (left).*

Each platoon marches in column of twos to the right; each chief of platoon takes post on the left of his leading guide; the leading guide of the platoon on the flank announced is the guide of the detachment; the leading guide of the other platoon marches abreast of him and preserves the interval necessary to form front into line.

The post of the officer commanding is three paces in front of the line of leading guides and opposite the center of the interval between the platoons.

To form or march again in column of platoons.

92. 1. *Twos right (left),* 2. ***MARCH,*** 3. *Detachment,* 4. ***HALT;*** or, 3. *Full step,* 4. ***MARCH,*** 5. *Guide right (left).*

Being in line of platoons in column of twos, to form line to the front.

93. 1. *Platoons,* 2. *Right (Left) front into line,* 3. ***MARCH,*** 4. *Detachment,* 5. ***HALT,*** 6. ***FRONT.***

Each platoon forms right front into line; each chief of platoon takes post in rear of his platoon, passing around its left flank.

The command *halt* is given when the leading twos have advanced detachment distance.

If the movement is executed in double time, the officer commands: *Guide left* (*right*), after the command *march.*

Being in line of platoons in column of twos, to form column of twos, to the right or left.

94. 1. *Platoons,* 2. *Forward, column right* (*left*), 3. ***MARCH.***

The chiefs of platoons take their posts, passing around the heads of their platoons, as they are about to unite in column of twos. If marching the command *forward* is omitted.

Being in column of twos, to form column of platoons.

95. 1. *Platoons,* 2. *Right* (*Left*) *front into line,* 3. ***MARCH,*** 4. *Detachment,* 5. ***HALT.***

At the second command each chief of platoon places himself near the head of his platoon.

At the command *march,* each platoon forms right front into line.

The command *halt* is given when the leading two has advanced detachment distance; each chief of platoon verifies the alignment of his platoon, commands: ***FRONT,*** and takes his post.

If marching in double time or in quick time, and the command be *double time,* the command: *Guide left* (*right*), is given after the command *march.*

Being in column of twos, to march in line of platoons in column of twos to the right or left.

96. 1. *Platoons,* 2. *Forward, column right* (*left*), 3. ***MARCH,*** 4. *Guide right* (*left*).

Each platoon changes direction to the right; each chief of platoon takes his post by the side of his leading guide.

If marching the command *forward* is omitted.

LITTER DRILL.

97. The purpose of this drill is to teach the most useful methods of handling sick and wounded, to secure concerted action, and for the disciplining effect which follows drill in prompt obedience to the word of command. When the men have thoroughly mastered it, litter squads should work independently as in actual service.

98. The regulation hand litter consists of a canvas bed 6 feet long and 22 inches wide, made fast to two poles 7½ feet long, and stretched by two jointed braces. The ends of the poles form the handles, 9 inches long, by which the litter is carried. The fixed iron legs are stirrup-shaped, 4 inches high and 1¾ inches wide. On the left front and right rear handles a half-round iron ring is fixed, 4½ inches from the end; between this and the canvas plays the movable ring of the sling.

One pair of slings is permanently attached to each litter. They are made of khaki-colored webbing, 2½ inches wide, with a leather-lined loop at each end and a slide to regulate the length. One loop of the sling passes through a metal swivel, itself attached to the movable ring of the handle.

99. When the detachment is formed for drill or instruction, officers and enlisted men wear the prescribed uniform. The instructor will require that the clothing of the men be clean and neatly adjusted, and that the privates fall in equipped with pouch, belt, and knife. Noncommissioned officers wear the belt and knife.

100. For purposes of litter drill each set of two is a litter squad. The litter squad is marched by the commands applicable to a set of twos, substituting "litter" for "two." No. 2 is the squad leader. He commands his squad and is responsible for it. When practicable he should be a private first class.

101. The litter is said to be *strapped* when folded, the canvas doubled smoothly on top, the slings placed parallel to each other thereon, and all secured by the cross straps. It is said to be *closed* when unstrapped, the loop of the front sling upon the left handle, and of the rear sling upon the right, the bight of each sling embracing the opposite handle.

102. The detachment having been formed and reported and the officers and noncommissioned officers assigned to appropriate duties, the instructor commands:

1. *Procure litter*, 2. *Right* (*Left*) *face*, 3. ***MARCH.***

At *litter*, the Nos. 2 step one pace to the front, at *face* they face as required, and at *march* proceed in column of files, by the nearest route, to the strapped (or closed) litters. They each take one, place it on the right shoulder at an angle of 45 degrees, canvas down, and promptly return in the reverse order, each man resuming his place in the rank by passing through his interval one pace to the rear, facing about, and stepping forward with the left foot into line. If the litters are in front of the detachment, the Nos. 2 may be marched directly forward, converging toward them, and then back, diverging to their intervals.

This march should be supervised by a noncommissioned officer. It may be executed in double time.

With but one squad the commands are simply *procure* (*return*) *litter, march;* when the bearer proceeds and returns by the shortest practicable route.

103. At the *shoulder* the litter is held canvas down upon the shoulder, the right hand grasping the right stirrup; the left hand is dropped to the side.

Pl. 14, Par. 102.

104. In all motions from the *shoulder*, or to the *shoulder*, the litter should invariably be brought to the *vertical position* against the right shoulder, canvas to the rear, right hand grasping the right stirrup, the left forearm horizontal, and the left hand steadying the litter against the shoulder.

Pl. 15, Par. 104.

This position should be taken by the bearer when passing through his interval to resume his place in the line (par. 102), and in any formation or movement in which there may be danger of the lower or upper handles of the litter striking neighboring men; after which the *shoulder* is resumed without command.

105. A stack consists of three litters, to which more may be added.

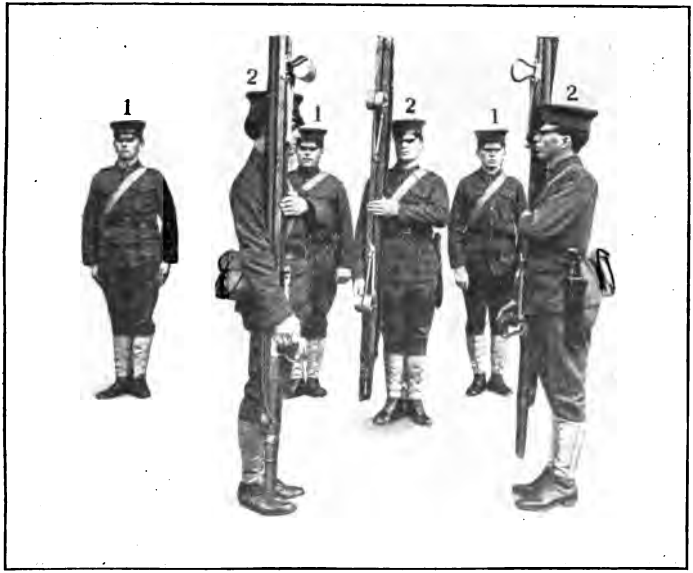
Being in line at the shoulder, the instructor designates by number the center squads (squad), as follows:

Center squads (squad) 2, 5, 8, etc. and then commands:

1. *Stack*, 2. ***LITTERS.***

At *litters*, each No. 2 brings his litter to the *vertical position;* No. 2 of the center squad steps one pace to the front and stands fast; the Nos. 2 next on the right and left step three paces to the front, halt, face each other, close in half a pace, and, placing the lower handles of the litter upon the ground, 12 inches behind and the same distance to the outer side of the heel farthest from the detachment, lock the upper handles together; No. 2 of the center squad at the same time places the lower handles of his litter between his feet and then locks the upper handles with one of those of the other two squads, advancing the left foot. The canvas of litters will be on the outer face of the stack.

As soon as the stacks are formed any additional litters are laid on and the bearers take their posts in the rank.

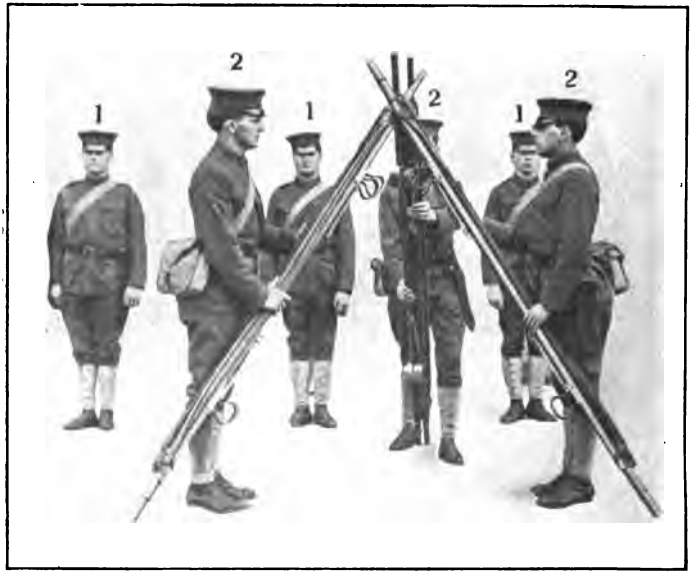


Pl. 16, Par. 105.

106. Being at the stack:

1. *Take*, 2. ***LITTERS.***

At *litter*, the Nos. 2 close in on the center as in the previous paragraph, advancing to the stack, and grasping their respective litters, break the stack, and resume their position in line as in par. 102.



Pl. 17, Par. 105.

107. Being at the *shoulder:*

1. *Order*, 2. ***LITTER.***

At the second command the litter is first brought to the vertical position, and the lower handles then dropped to the ground outside the right foot, canvas to the rear, the right arm naturally extended, and the hand grasping the front poles; the left hand is dropped to the side.

108. Being at the *order:*

1. *Shoulder*, 2. ***LITTER.***

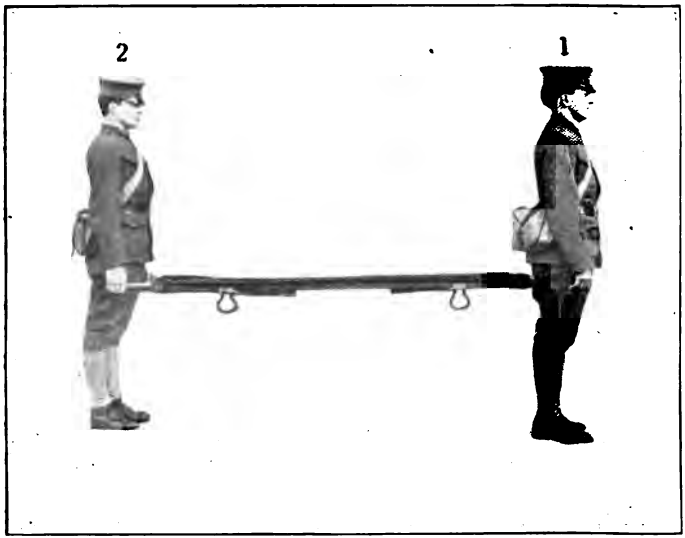
At *litter*, the litter is first brought to the vertical position and then raised until the left wrist is level with the chin when it is laid canvas down upon the shoulder, the right hand grasping the right stir-; the left hand is dropped at the side.

Pl. 18, Par. 107.

109. Being in line, litters at the *shoulder:*

1. *Carry,* 2. ***LITTER.***

At *litter,* each No. 2 brings his litter to the vertical position, drops the upper handles forward and downward until the litter is in a horizontal position, canvas up, and grasps the outside handle with his right hand; meanwhile No 1. steps directly to the front until he is opposite the front handles when he grasps his outside handle with his left hand. The guides step forward and place themselves in line with the front bearers.



Pl. 19, Par. 109.

110. Being at the carry:

1. *Ground*, 2. ***LITTER.***

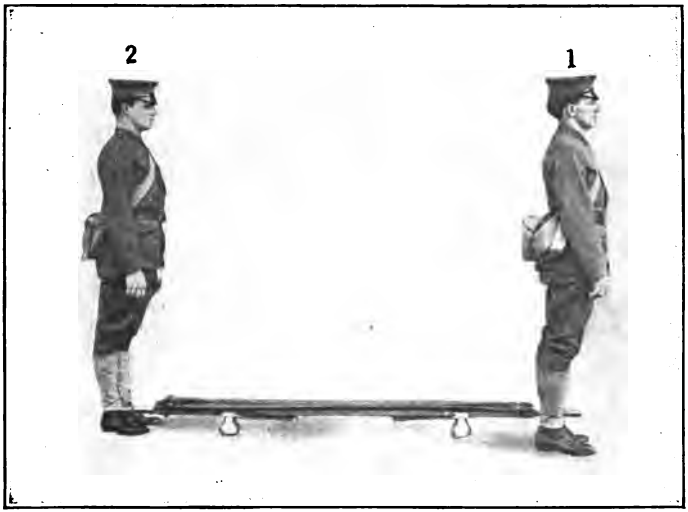
At *litter*, the bearers stoop and lower the litter to the ground, canvas up, and stand erect, facing the front.

111. Being at the ground:

1. *Carry*, 2. ***LITTER.***

At *litter*, the bearers stoop, grasp the handles and raise the litter from the ground to the carry.

112. To rest the carrying hand:



Pl. 20, Par. 110.

1. *Change*, 2. ***HANDS.***

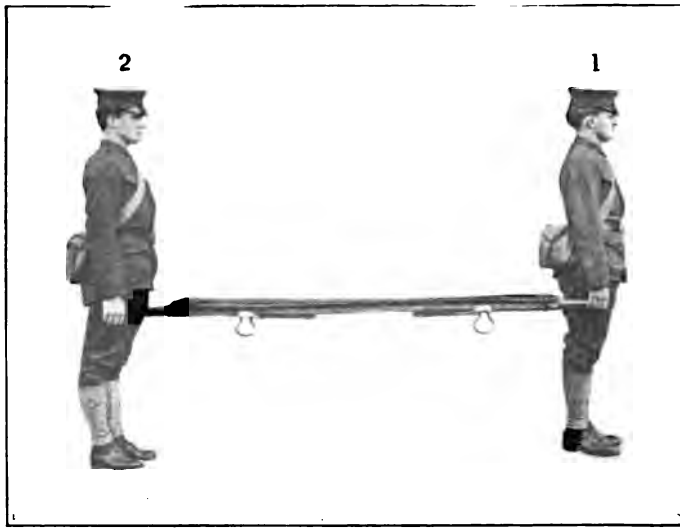
At *hands*, each bearer shifts the litter to his free hand, at the same time taking position on the opposite side of the litter.

Original positions are recovered by the same commands.

113. Being at *carry*:

1. *Shoulder*, 2. ***LITTER.***

At *litter*, No. 2 advances and plants the left foot, reaches forward with the left hand and grasps the litter near its center, grasps the right stirrup with the right hand, and brings the litter to the *vertical position* and then to the shoulder, at the same time replacing the left foot by the right; meanwhile No. 1 steps backward and aligns himself upon No. 2.



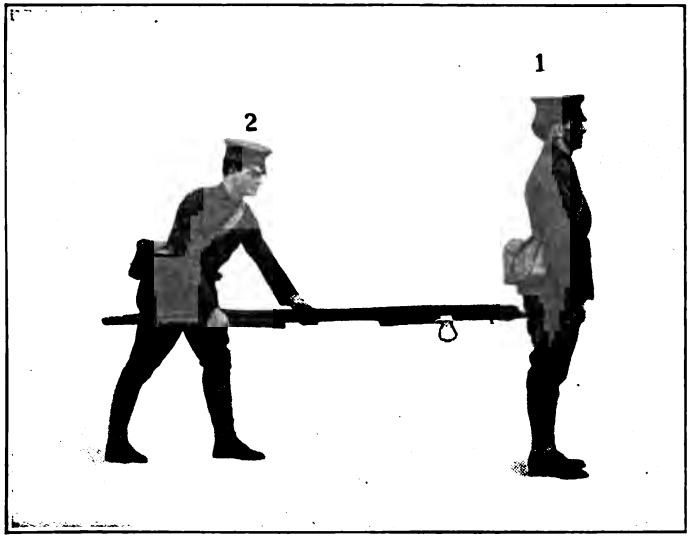
Pl. 21, Par. 112.

114. Being at the *carry*, litter *strapped*.

1. *Open*, 2. ***LITTER.***

At *litter*, both bearers face the litter, unbutton the straps, button them to the studs on their respective poles, and slip the free loop of each sling upon the ring handle, the bight embracing the opposite handle; they then grasp the left handles with their left hands and drop the other handles, the litter thus being suspended by the left pole, canvas to the right. They then fully extend the braces, lower the litter to the ground, canvas up, and resume the *attention*, standing between the handles and facing the front.

If the litter is *closed* but not *strapped*, so much of this paragraph as relates to the disposition of the straps does not apply.

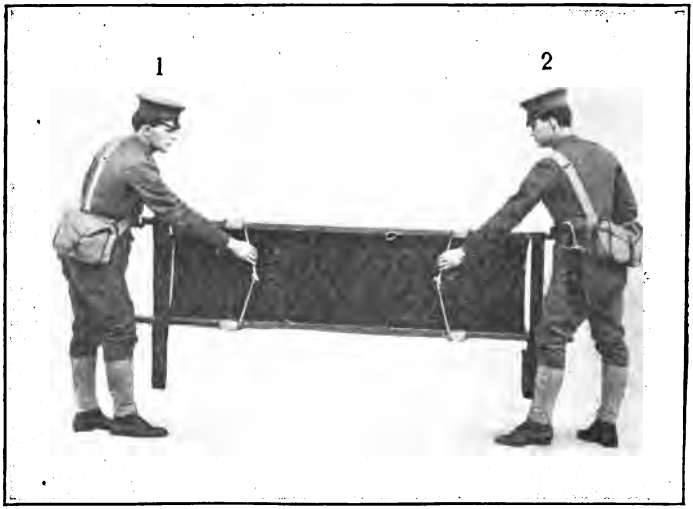


Pl. 22, Par. 113.

115. To *secure slings*, the litter being lowered:

1. *Secure*, 2. ***SLINGS.***

At *slings*, each bearer slips off the bight of his sling, drops the doubled end over the free handle and brings it up around the handle, slipping the double end through the sling and over the end of the handle. The slings will be secured before the litter is closed and whenever it is desired to prevent them from dragging on the ground, or from being in the way when passing obstacles, loading ambulances, etc.



Pl. 23, Par. 114.

116. The litter being open and lowered, and slings secured:

1. *Close*, 2. ***LITTER.***

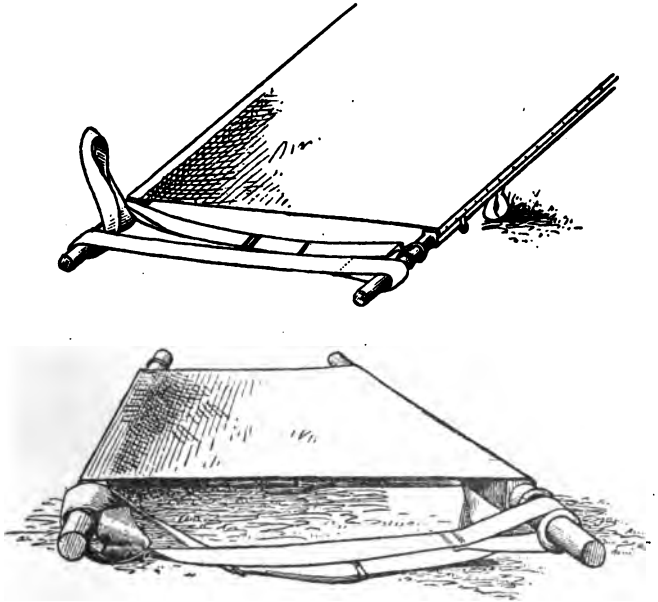
At *litter*, Nos. 1 and 2, respectively, step outside the right front and left rear handles, and face inward; they stoop and with their hands raise the litter by the handle of the left pole; they then fold the braces, and bringing the lower pole against the upper, face to the front and support the litter at the carry.

117. The litter being closed and at the *carry:*

1. *Strap*, 2. ***LITTER.***

At *litter*, the bearers place the litter on the ground, fold the canvas smoothly, free edge of fold to the left, place the slings lengthwise of the litter on the canvas, slides up, and neatly secure all by the cross strap at each end, passed around poles and through free loops of slings, when all take posts at the *carry* without command.

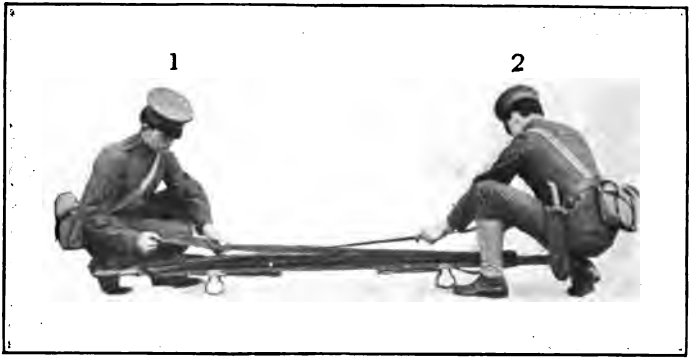
In the field the litter should habitually be carried *strapped* or *closed*, and only opened on reaching the patient.



Pl. 24, Par. 115.

The litter may in like manner be *closed* and then *strapped*, being at the *open*, at the command *strap litter*, when the motions begin with those described under *close litter*.

118. To bring the squad into line, the litter being at the *ground*, or the *open*, with the men at *litter posts:*



Pl. 25, Par. 117.

1. *Form*, 2. ***RANK.***

At *rank*, No. 1 advances one pace and No. 2 aligns himself upon No. 1. Original positions at the litter are resumed at the command *litter posts* (par. 119), all executing an about face, proceeding to their posts at the litter, and facing to the front together.

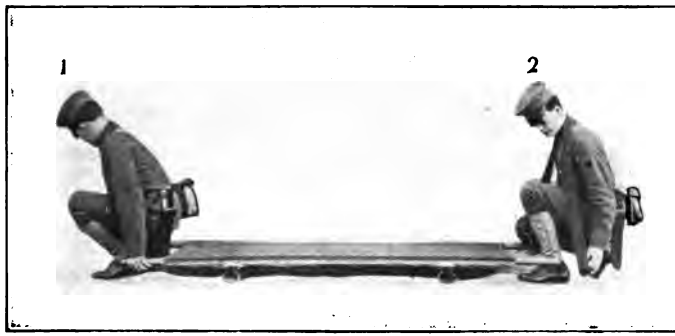
This movement permits the marching of the squad, without litter, to any desired point.

119. Posts at the litter may at any time be recovered by the commands:

1. *Litter*, 2. ***POSTS.***

If at the ground, the numbers take posts, No. 1 on the right of the front handles, No. 2 on the left of the rear handles and close to them, facing the front (Pl. 20). If at the *open*, Nos. 1 and 2 take posts between the front and rear handles, respectively, facing the front.

120. The foot, or front, of a grounded or opened (unloaded) litter is the end farthest from the approaching squad, unless otherwise designated. The foot of a loaded litter is always the end corresponding to the feet of the patient.



Pl. 26, Par. 121.

121. Being at the open:

1. *Prepare to lift*, 2. ***LIFT.***

At the first command the bearers without facing about, stoop, slip the slings off the handles, and place them over their shoulders; they then replace the free loop upon its handle, adjust the length of the slings if necessary, and firmly grasp the handles of the litter; at *lift* they slowly rise erect.

122. At the command:

1. *Forward*, 2. ***MARCH,***

the bearers step off, No. 1 with the left and No. 2 with the right foot, taking short, sliding steps of about 20 inches, to avoid jolting and to secure a uniform motion to the litter. The cadence is at the rate of about 100 steps per minute.

123. Being at the lift:

1. *Lower*, 2. ***LITTER.***

At *litter* the bearers slowly lower the litter to the ground. Each number then seizes the free loop and bight of his sling, removes the sling from his shoulders, and places the loop upon the ring handle, the bight embracing the opposite handle.

124. When the litter is to be moved but a few paces, it may be lifted and marched without slings by prefixing *without slings* to the commands: *Prepare to lift,* ***LIFT.***

125. The open litter should be lifted and lowered slowly and without jerk, both ends simultaneously, the rear bearer moving in accord with the front bearer, so as to maintain the canvas horizontal. In fact the open litter should be handled for purposes of drill as if it were a loaded litter, and as soon as the men are familiar with its manual the drill should, whenever practicable, be with loaded litter.

126. Being in line at the *shoulder:*

1. *Return litter,* 2. *Right (left) face,* 3. ***MARCH.***

At *litter,* the Nos. 2 bring the litter to the vertical position, and step one pace to the front. At *face,* they face as required and bring the litter to the shoulder, and at *march* proceed in column of files by the nearest route to the place designated for the litters, where they leave them, and, returning in reverse order, resume their positions by passing through their intervals, one pace to the rear, facing about, and stepping forward with the left foot into line. If the place designated is in front of the detachment (or if there is but one squad), the Nos. 2 proceed as described in par. 102. This movement should be supervised by a commissioned officer. It may be executed in double time.

127. In marching the litter is usually at the *carry,* but may be at the *shoulder* when space permits or squads are working independently.

128. In close order the interval between closed litters is about one and a half paces, which is insufficient to permit of their being brought into column. In extended order the interval is about four paces and distance one pace.

The manual of the litter is executed in close order; all marchings with the litter in open order.

MARCHINGS WITH LITTER.

To take intervals.

129. Being in line of litters at the shoulder:

1. *To the right (left) take intervals,* 2. ***MARCH,*** 3. *Detachment,* 4. ***HALT,*** 5. ***FRONT.***

At the command *march* all come to the vertical position, face to the right (left) and the leading squad steps off. Nos. 1 and 2 of each squad preserve facing distance with relation to each other.

When the leading squad has advanced three paces the squad next in order steps off following it in column, and so on until all squads are marching in the indicated direction, three paces apart.

At *halt* all halt and face to the original front and the Nos. 2 return to the *shoulder*. All then dress to the *right* (*left*) and at *front* turn their heads and eyes to the front.

From this position litters may be brought to the carry by appropriate command.

130. To assemble, being in line of litters at the shoulder, intervals taken:

1. *To the right* (*left*) *assemble*, 2. ***MARCH***, 3. ***FRONT***.

At *march* the squad on the flank indicated stands fast in position. The other squads face to the *right* (*left*), their Nos. 2 coming to the *vertical position*, close in as commanded, face to the front, come to the shoulder, and dress to the *right* (*left*). At *front* they turn their heads and eyes to the front.

131. To align a line of litters at a halt, the litters being at the *carry* or *lift*, the commands are:

1. *Right* (*Left*), 2. ***DRESS***. 3. ***FRONT***.

At *dress*, all execute *eyes right*, the Nos. 1 aligning themselves on the right guide, or on No. 1 of the first squad; all promptly recover their intervals, if lost. At *front*, all turn the head and eyes to the front.

132. The line or column of litters is marched by the commands already given (par. 57 and following), substituting *litters* for *twos*. Whenever the squad is marching the litter should be at the *carry* or *shoulder*.

The following movements require special notice or description:

To turn on fixed pivot.

133. 1. *Detachment right* (*left*), 2. ***MARCH***, 3. *Detachment*, 4. ***HALT***; or, 3. *Full step*, 4. ***MARCH***, 5. *Guide right* (*left*).

The first litter halts and, taking the short step, wheels to the right on its own ground; the other litters half wheel to the right and place themselves successively upon the alignment established by the right litter (par. 65).

To turn on moving pivot.

134. 1. *Right* (*left*) *turn*, 2. ***MARCH***, 3. *Full step*, 4. ***MARCH***, 5. *Guide right* (*left*).

The first litter takes the short step and wheels to the right on a movable pivot, followed by the others as in par. 66.

BEING IN LINE OF LITTERS, TO MARCH BY THE FLANK IN COLUMN OF LITTERS.

135. 1. *Litters right* (*left*), 2, ***MARCH***, 3. *Detachment*, 4. ***HALT***, or 3. *Full step*, 4. ***MARCH***.

At the command *march*, No. 1 steps off to the right and No. 2 to the left, each describing a quarter of a circle, so as to make the litter revolve horizontally on its center until both face to right. The right guide places himself one pace in front of the first litter and the rear guide one pace in rear of the last litter.

BEING IN LINE OR COLUMN TO MARCH TO THE REAR.

136. 1. *Litters right* (*left*) *about*, 2. ***MARCH***, 3. *Detachment*, 4. ***HALT***, or 3. *Full step*, 4. ***MARCH***.

At *march*, Nos. 1 and 2 step off as in par. 135, but continue the movement until both face to the rear. If the *about* is executed in line the guide should be announced on completion of the movement.

137. A platoon of litters consists of four litter squads in line with intervals taken. The distance between platoons of litters in column is equal to the front of a platoon.

138. The line or column of platoons is marched by the commands already given (par. 82 and following), substituting *litters* for *twos*.

139. The advantage of this formation is that it permits the shortening of the column at the carry without increasing its front by the commands: 1. *Platoons*, 2. *Close*, 3. ***MARCH***, when the platoons close up to one pace, and the litters oblique toward each other until there is an interval of one and one-half paces between litters. In this formation each chief of platoon takes post on the left of his left guide.

140. The normal formation is resumed by the commands:

1. *Platoons*, 2. *Extend*, 3. ***MARCH.***

Line is re-formed by the same commands used to form column.

ROUTE STEP.

141. The column of strapped litters at the *carry* is the habitual column of route. The litter may, however, be carried at the *shoulder* when practicable. The rate is 3 to 3½ miles per hour.

Marching in quick time:

1. *Route step*, 2. ***MARCH.***

The men are not required to preserve silence, nor keep the step. The litter squads preserve their distance.

142. If from a halt:

1. *Forward*, 2. *Route step*, 3. ***MARCH.***

143. To resume the cadence step:

1. *Detachment*, 2. ***ATTENTION.***

At the command *attention*, the cadence step in quick time is resumed.

Upon halting while marching in route step, the men come to the *rest;* the litter may be brought to the *order*, or *ground* if so directed.

144. To march at ease:

1. *At ease*, 2. ***MARCH.***

The detachment marches as in route step, except that silence is preserved.

THE LOADED LITTER.

TO LOAD AND UNLOAD THE LITTER.

145. For drill in loading the litter, the "patients" are directed to lie down at suitable intervals near the line of litters, first with head and later with feet toward it, and lastly in any position. Each squad may be separately exercised under its leader, or an instructor, or several squads simultaneously.

146. The litter being at the *open*, the patient, with two bearers, must always be carried to it. This may be done in either of two ways.

147. The litter being at the *open*, the instructor commands:

1. *Right* (*Left*) *side*, 2. ***POSTS.***

If the command is *right side, posts*, the bearers go to right side of patient and take positions, No. 1 at the right thigh and No. 2 at the right shoulder, facing the patient. If the command is *left*, they take similar positions on the left side.

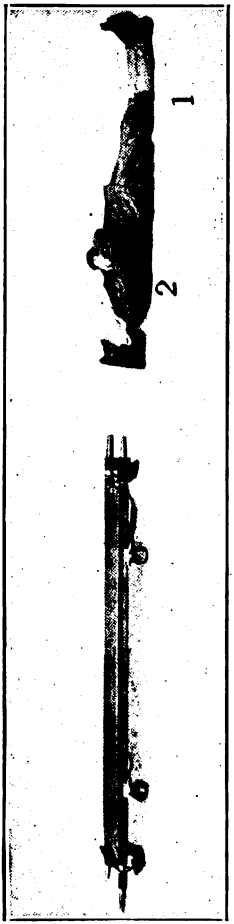
148. 1. *Prepare to lift*, 2. ***LIFT.***

At the first command the bearers kneel on the knee nearest the patient's feet. No. 1 passes one arm under the hips and the other beneath the knees; No. 2 passes one hand under the patient's shoulders to the further armpit, and the other arm beneath the small of the back.

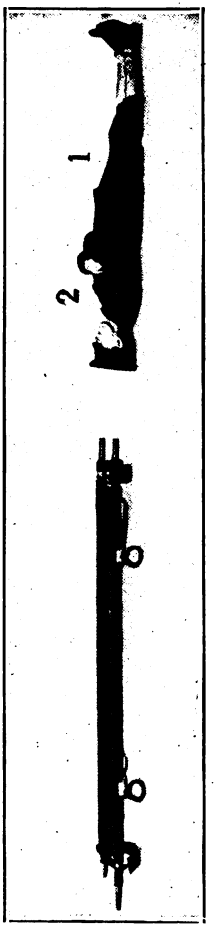
At *lift*, they lift together, slowly and carefully, raising the patient upon their knees, then readjusting their hold, rise to their feet and carry the patient by the shortest route to the side of the litter, when the squad is *halted.*

149. 1. *Lower*, 2. ***PATIENT.***

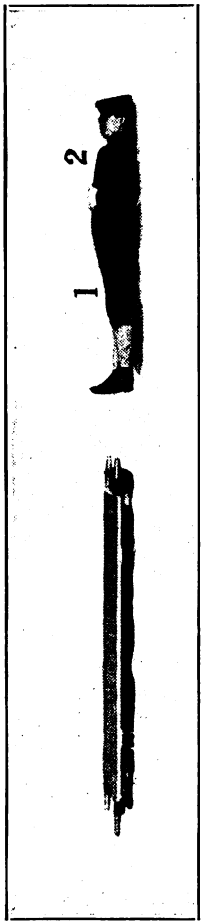
At *patient*, the bearers kneel and place the patient on their knees; they stoop forward and lower him gently upon the litter; they then rise, and at once resume their positions at *litter posts*, without command.



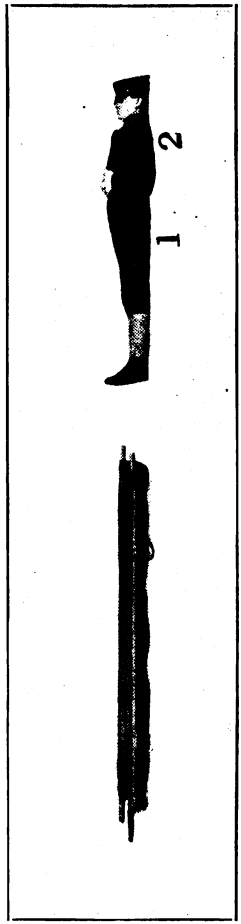
Pl. 27, Par. 147.



Pl. 28, Par. 147.



Pl. 29, Par. 147.



Pl. 30, Par. 147.

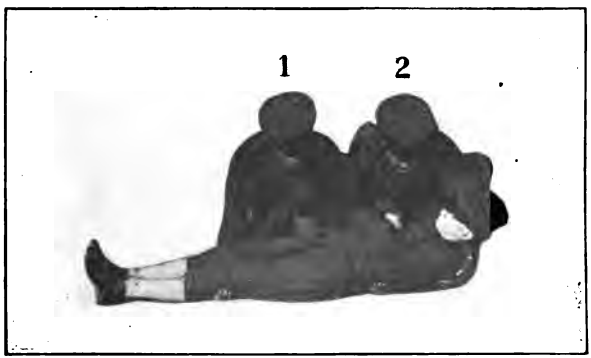
Should it be necessary in emergencies to use three bearers, this may be done with similar commands, by having the third bearer placed at the patient in such a way that he may support the knees and legs.

150. 1. *Hips*, 2. ***POSTS.***

At *posts*, No. 1 proceeds to the patient's right hip and No. 2 to the left hip, facing the patient.

151. 1. *Prepare to lift*, 2. ***LIFT.***

At the first command, the bearers kneel on the knee nearest the patient's feet, they then raise him to a sitting position, and pass each



Pl. 31, Par. 148.

one hand and arm around his back, while the other hands are passed under the thighs, grasping each other. The patient, if able, clasps his arms around the bearers' necks. At *lift*, they lift the patient, both rising together, and carry him to the center of the side of the litter where the squad is halted.

152. 1. *Lower*, 2. ***PATIENT.***

At *patient*, the bearers stoop and lower the patient upon the litter to a sitting position, the patient releasing his hold around the bearers' necks. No. 2 then passes his left hand across the front of the patient's chest to the opposite armpit and grasps the patient. No. 1 releases his hold at the right side of patient, steps astride of patient's lower extremities and grasps the patient's right and left thighs just above the knee with his left and right hands, respectively. Both bearers then turn and lower the patient upon the litter, head toward No. 2, and take their positions at *litter posts* without command.

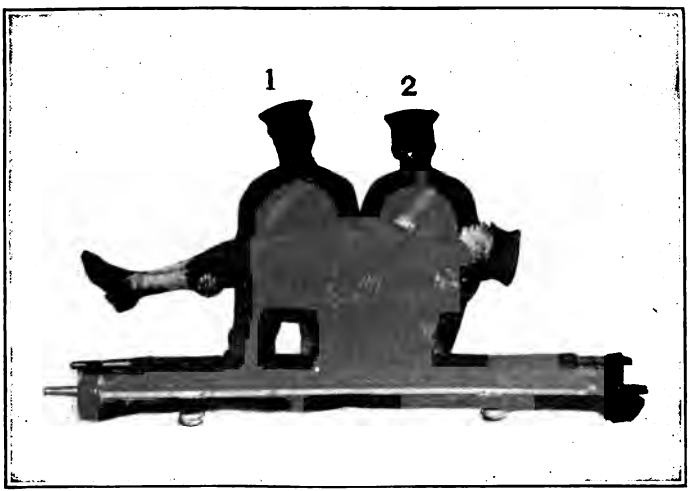
Pl. 32, Par. 148.

153. To *unload* posts are taken and the patient lifted in the same way and by the same commands. At *hips posts* the bearers take their posts at the sides of the litter and at *prepare to lift* they lift

the patient to a sitting position on the side of the litter by reversing the movements heretofore described and then take the position of prepare to lift.

The bearers move backward if at *side posts* and forward if at *hips posts*, until clear of the litter, when they *halt* and *lower patient.*

154. In the field the squad having reached the patient and taken their proper positions, secure his arms and accouterments, loosen his clothing, and examine him to determine the site and nature of the injury, applying such first-aid treatment as may be necessary.



Pl. 33, Par. 149.

The drill should be made as nearly as possible like service in actual warfare. For this purpose a diagnosis tag having been attached to the clothing of the "wounded" indicating the site and character of the injury to be dressed before loading, they are directed to take positions at variable distances, in or out of sight, such as they would occupy on the battlefield.

The litter being at the *carry*, at the command *Squad leaders take charge of squads*, each No. 2 assumes charge of his squad, which pro-

Pl. 34, Par. 151.

ceeds independently. When a patient is discovered the litter is halted and opened (by No. 2's commands) in the most convenient position, near the patient. The injury having been dressed, No. 2 commands: 1. *Right* (*Left*) *side*, 2. ***POSTS;*** or, 1. *Hips*, 2. ***POSTS,*** as may be most convenient, and the patient is lifted and lowered upon the litter, as described in pars. 147–152. The arms and accouterments of the patient are carried on the litter when practicable.

At the signal or order for assembly, the squads re-form in line, lower litters and come to rest, when the patients, if still upon the litters (the dressings, if any, having been removed), are directed to rise and resume their posts, after which the litters are strapped.

POSITION OF PATIENT ON THE LITTER.

155. The position of a patient on the litter depends on the character of his injury. An overcoat, blanket, or other suitable and convenient article should be used as a pillow to give support and slightly raised position to the head. If the patient is faint the head should be kept low. Difficulty of breathing in wounds of the chest is re-

lieved by a sufficient padding underneath. In wounds of the abdomen the best position is on the injured side, or on the back if the front of the abdomen is injured, the legs in either case being drawn up, and a pillow or other available object placed under the knees to keep them bent.

In an injury of the upper extremity calling for litter transportation, the best position is on the back with the injured arm laid over the body or suitably placed by its side, or on the uninjured side with the wounded arm laid over the body. In injuries of the lower extremity the patient should be on his back, or inclining toward the wounded side; in case of fracture of either lower extremity, if a splint can not be applied, it is always well to bind both limbs together.

Pl. 35, Par. 152.

GENERAL DIRECTIONS.

156. In moving the patient either with or without the litter, every movement should be made deliberately and as gently as possible, having special care not to jar the injured part. The command *steady* will be used to prevent undue haste or other irregular movements.

Pl. 36, Par. 152.

157. *The loaded litter should never be lifted or lowered without orders.*

158. The rear bearer should watch the movements of the front bearer and time his own by them, so as to insure ease and steadiness of action.

159. The number of steps per minute will depend on the weight carried and other conditions affecting each individual case.

160. The handles of the litter should be held in the hands at arm's length and supported by the slings. Only under most exceptional conditions should the handles be supported on the shoulders.

161. The bearer should keep the litter level notwithstanding any unevenness of the ground.

162. As a rule, the patient should be carried on the litter feet foremost, but in going uphill his head should be in front. In case of fracture of the lower extremities, he is carried uphill feet foremost and downhill head foremost to prevent the weight of the body from pressing down on the injured part.

TO PASS OBSTACLES.

163. A breach should be made in a fence or wall for the passage of the litter. If there is no gate or other opening, or should it be necessary to surmount the obstacle, the latter being not over 3 feet high, the litter is *halted* and *lowered* and *slings secured*, when the commands are given:

1. *At sides of litter*, 2. ***POSTS.***

At *posts*, Nos. 1 and 2 take posts on the right and left of the litter, respectively, at the center and facing it.

164. 1. *Prepare to lift*, 2. ***LIFT***, 3. ***MARCH.***

At the first command the bearers stoop and seize their respective poles with both hands; at *lift*, the litter is lifted, and at *march*, it is advanced to the obstacle and passed over until the front stirrups have cleared it. The litter is there rested, while No. 2 steps around between the rear handles which he supports, No. 1 getting over the obstacle; No. 1 takes the front handles facing the litter and together the bearers pass the litter over until the rear handles rest on the obstacle, when No. 2 gets over, taking left front handle, and both resuming *at sides of litter posts*, move the litter forward until free of the obstacle, when they *halt* and *lower litter*, and resume *litter posts* without command.

165. The passage of a cut or ditch not over 3 feet deep is effected in a similar manner, but without special command. The litter being *halted* and *lowered* at its edge, No. 1 descends into the ditch and takes hold of the front handles, facing the litter. Both bearers then support and advance the litter until only the rear stirrups or handles rest upon the edge, when No. 2 descends and the litter is carried across. *These directions are general.*

BEARER WORK WITH INCREASED NUMBERS.[a]

166. Under exceptional circumstances, as in ascending or descending stairs, when the patient is very heavy, the ground difficult, or an obstacle over 3 feet high has to be surmounted, it may be necessary to use additional bearers.

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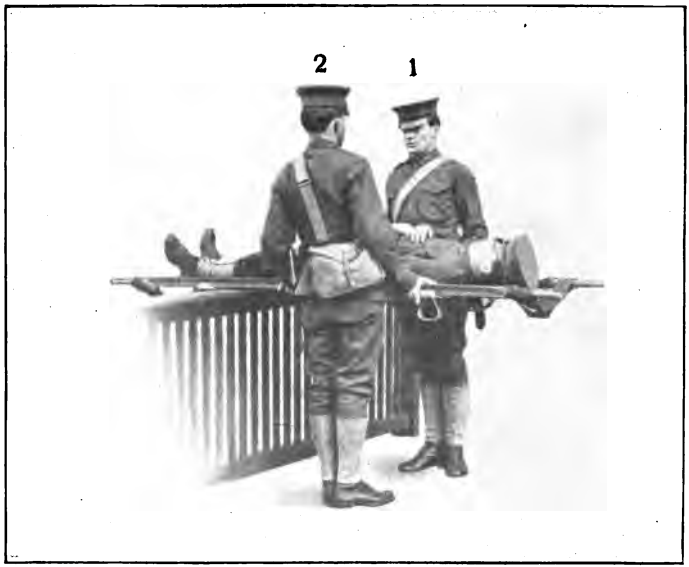
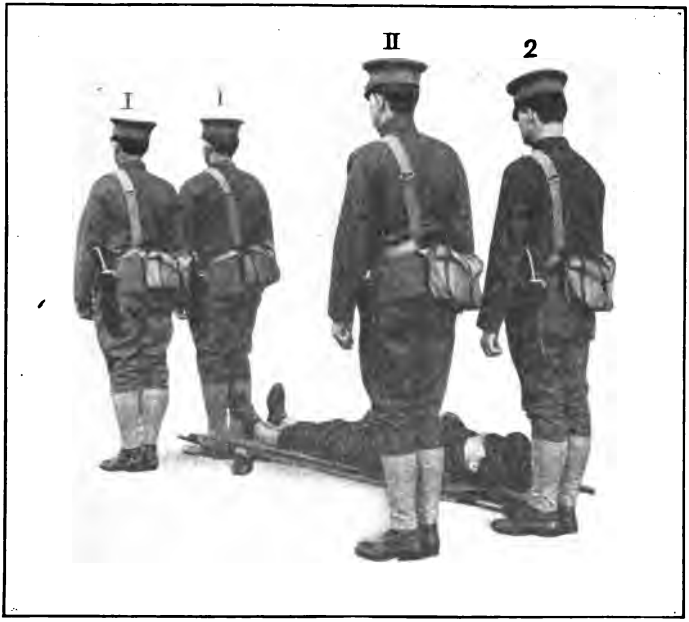
[a] The positions of the numbers of the additional squads are shown in the plates by Roman numerals.



Pl. 37, Par. 164.

167. When three bearers are available, the third bearer gives aid where most needed; in loading and unloading he usually places the litter under the patient or removes it, but he may assist in supporting a fractured limb. In litter bearing he acts as a relay, or assists in supporting either end of the litter as directed.

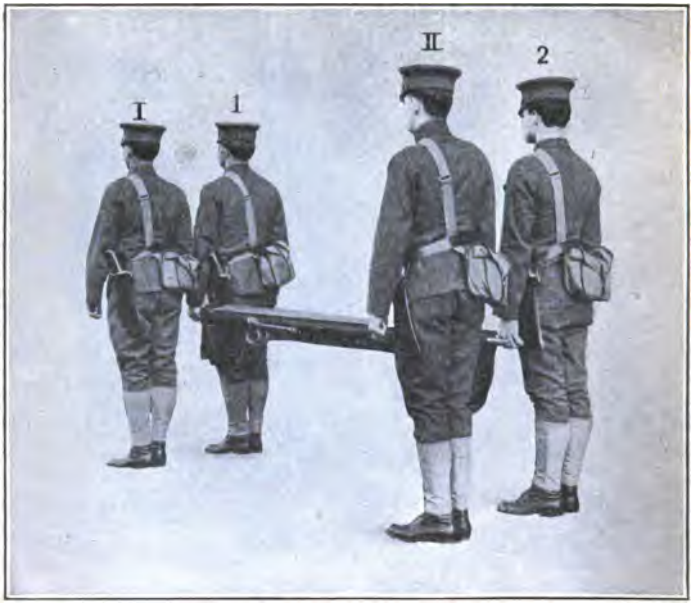
168. When necessary to use an additional squad, the first squad being at *litter posts*, the commands are given:



Pl. 38, Par. 168.

1. *Additional squad*, 2. *Litter*, 3. ***POSTS.***

The post of the additional squad is on the left of the litter close to it and facing the front, No. 1 by the front handle and No. 2 by the rear handle; No. 2 of the first squad is in command. If the first squad is at the *carry* or *ground* its No. 2 steps to the right side of the litter when the second squad takes posts, and if at the *carry* shifts the litter from his right to his left hand.



Pl. 39, Par. 168.

169. To change posts, the litter being at the *lower* or *ground:*

1. *Change*, 2. ***POSTS.***

At *posts*, the squads change places, retaining their relative positions in the squad.

170. To change bearers, litter at the *carry:*

1. *Change*, 2. ***BEARERS.***

At *bearers*, the litter is shifted from one squad to the other, the position of the squads remaining unchanged.

171. To carry the litter by four bearers, the litter being *lowered* and the squads at *litter posts:*

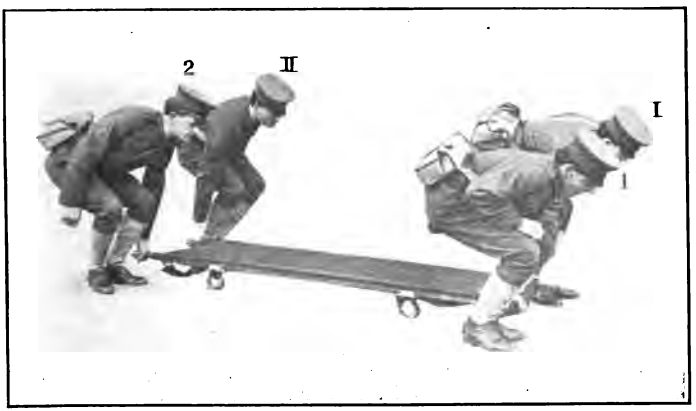
1. *Four bearers,* 2. *Litter,* 3. ***POSTS.***

At *posts,* the first squad steps outside the right handles of the litter, facing the front and opposite the additional squad.

172. 1. *Prepare to lift,* 2. ***LIFT.***

At the first command all stoop and grasp with one hand the handle nearest them and at *lift* rise erect.

173. To surmount an obstacle over 3 feet high, the litter being lifted by *four bearers* (two squads) the commands are given:



Pl. 40, Par. 172.

1. *Raise,* 2. ***LITTER,*** 3. ***MARCH.***

At the second command the bearers face the litter, grasp the handles with both hands, and carefully raise it to the level of the obstacle; at *march* they carry it over until the front stirrups have cleared, where it is rested. The front bearers cross the obstacle and resume hold of the handles on the other side; the litter is then ad-

vanced until only the rear handles rest on the obstacle, when the rear bearers get over and resume hold of their handles; the litter is then *halted* and *lowered*.

Pl. 41, Par. 173.

174. When it is necessary to use four bearers to load, the commands are:

1. *Four bearers*, 2. *Right* (*left*) *side*, 3. ***POSTS.***

At *posts*, the first squad take their usual posts (par. 147); No. 1 of the additional squad takes post opposite No. 1 of the first squad, and No. 2 at the right (left) ankle.

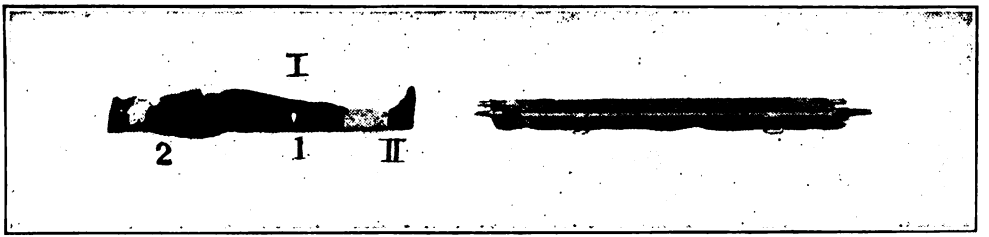
Pl. 42, Par. 173.

175. 1. *Prepare to lift*, 2. ***LIFT.***

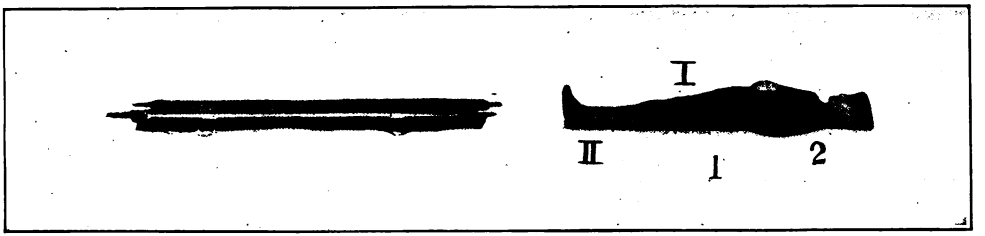
At the first command all the bearers kneel on the knee nearest the patient's feet (right knee if on the right of the patient, and on the left knee if on his left); No. 2, second squad, passes both forearms under the patient's legs, carefully supporting the fracture

Pl. 43, Par. 174.

Pl. 44, Par. 174.



Pl. 45, Par. 174.



Pl. 46, Par. 174.

Pl. 47, Par. 175.

Pl. 48, Par. 175.

if there be one; the Nos. 1 pass their arms under the small of his back and thighs, not locking hands; No. 2, first squad, passes one hand under his neck to the farther armpit, with the other supporting the nearer shoulder.

At the second command all lift together slowly and carefully and place the patient upon the knees of the three bearers. As soon as he is firmly supported there, the bearer on the free side relinquishes his hold, passes quickly and by the shortest line to the litter, which he takes up by the middle, one pole in each hand, and returning rapidly, places it under the patient and against the bearers' ankles.

176. 1. *Lower*, 2. ***PATIENT.***

The free bearer stoops and assists the other numbers in gently and carefully lowering the patient upon the litter. The bearers then rise and at once resume their positions at *litter posts* (par. 171).

177. To unload, posts are taken at patient as in loading. At the commands:

1. *Prepare to lift*, 2. ***LIFT,***

the patient is lifted and placed upon the knees of the three bearers, as in par. 175, the free bearer then removes the litter, and at *lower patient* all lower him carefully to the ground.

TO CARRY A LOADED LITTER UPSTAIRS.

178. The loaded litter is usually carried upstairs head first, and downstairs, feet first.

To carry loaded litter upstairs: Two squads are required for this movement. The litter is marched to the foot of the stairs in the usual manner, *wheeled about, halted, lowered*, and *slings secured.* It is then lifted by four bearers (par. 171–2), using both hands when necessary, and carried up. The litter must be kept as level as possible, the upper bearers lowering and the lower bearers raising their ends for this purpose and being careful to see that the litter is not tilted.

TO CARRY A LOADED LITTER DOWNSTAIRS.

179. The litter is carried downstairs in the same manner as it is carried upstairs, except that it is not wheeled about.

Pl. 49, Par. 178. The numbers are improperly placed. The rabic numerals should be on the right of the litter instead of he left, and the numbers one should be at the foot of the litter stead of the head.

180. When for any reason it is necessary to use three bearers, the commands 1. *Three bearers, prepare to lift,* 2. ***LIFT,*** are used. At the first command the additional bearer takes post outside the left handle at the foot of the litter, opposite No. 1, who steps outside the right handle. Both face the litter, stoop, and grasp their respective poles. No. 2 faces about, stoops, and grasps his handles. At *lift,* the litter is lifted and carried up (or down) the stairs. If

the litter is to be carried downstairs by three bearers, No. 2 does not face about.

FROM LITTER TO BED.

181. The litter is placed at the foot of the bed, as nearly as possible in line with it, and the patient is transferred to the bed, as described in par. 153. Often it is simpler, after the patient is lifted,

to roll the bed in front of the bearers, who then lower the patient upon it. If there is no fracture or other contraindication the litter may be brought to the side of the bed and level with it and held there, while the patient is directed to roll over onto the bed. If a third man is available, as he usually is in hospitals, the litter may be *halted* and *lowered* at the side of the bed when, after the patient is lifted, the litter is drawn out by the third bearer, the other two stepping forward and lowering the patient upon the bed.

182. From *litter* to *litter* is executed in the same manner as from *itter* to *bed.*

IMPROVISATION OF LITTERS.

183. Many things can be used for this purpose: Camp cots, window shutters, doors, benches, ladders, etc., properly padded.

Litters may be made with sacks or bags of any description, if large and strong enough, by ripping the bottoms and passing two poles through them and tying cross pieces to the poles to keep them apart; two, or even three, sacks placed end to end on the same poles may be necessary to make a safe and comfortable litter.

Bedticks are used in the same way by slipping the poles through holes made by snipping off the four corners.

Pieces of matting, rug, or carpet trimmed into shape, may be fastened to poles by tacks or twine.

Straw mats, leafy twigs, weeds, hay, straw, etc., covered or not with a blanket, will make a good bottom over a framework of poles and cross sticks.

Better still is a litter with bottom of ropes or rawhide strips, whose turns cross each other at close intervals.

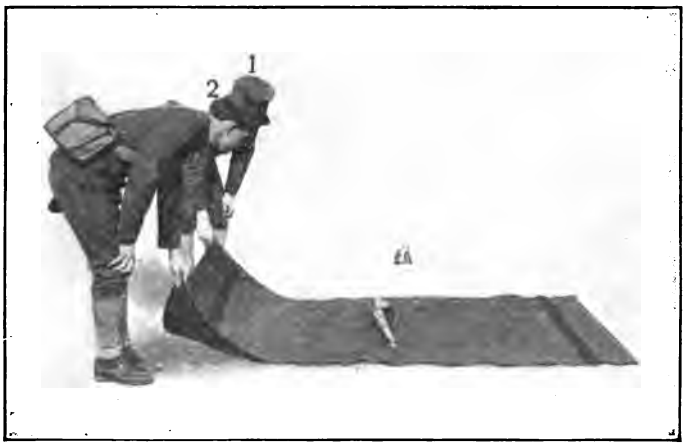
184. The usual military improvisation is by means of rifles[a] and blankets. Each bearer should be supplied with a rifle carried at the order. They assure themselves that the rifles are unloaded. The blanket rolled up is carried by No. 2 over the right shoulder.

1. *Prepare,* 2. ***BLANKET LITTER.***

At the second command the bearers lay their rifles on the ground and face each other; No. 2 slipping off his blanket roll, gives one end of the blanket to No. 1, and together they spread it out lengthwise on the ground. No. 1 then places his rifle across the center of the blanket, the butt toward the original front of the squad and trigger guard in. Both bearers (No. 1 at the left front, No. 2 at the

[a] Owing to the shortness of the present rifle it is of little use in this improvisation, but the method may be used with poles, instead of rifles.

left rear corner) fold the blanket over the rifle. No. 2 then places his rifle over the center of the new fold and the blanket is folded over the second rifle, as over the first. The bearers then take posi-



Pl. 51, Par. 184.

tion at *litter posts*, without command. When available, four bearers should be used for carrying this litter.

185. When no longer required, the commands are given:

1. *Take apart*, 2. ***BLANKET LITTER.***

At the second command the litter is taken apart, the blanket rolled up and placed over the right shoulder of No. 2, after which the bearers take their rifles and resume their original position in line.

186. Should it be desirable, the following method may be used: One-half of the blanket is rolled lengthwise into a cylinder, which is placed along the back of the patient, who has been turned carefully on his side. The patient is then turned over upon the blanket and the cylinder unrolled on the other side. The rifles are then laid down and rolled tightly in the blanket, each a like number of turns, until the side of the body of the patient is reached, when they are turned trigger guards up.

Pl. 52, Par. 184.

187. A litter may also be prepared with two rifles and two or three blouses, by turning the blouses lining out, and buttoning them up, sleeves in, when the rifles are passed through the sleeves, the backs of the blouses forming the bed.

TRANSPORTATION ON SHIPBOARD—NAVY LITTER (STOKES SPLINT STRETCHER).

For use on transports and hospital ships.

188. The navy litter weighs about 20 pounds, is 6 feet 8 inches in length, 20 inches wide at the shoulder, and 8 inches deep throughout. The frame, which is constructed of half-inch galvanized steel, consists of a horizontal piece to which alone the wire mesh is at-

tached and which is doubled at the hand openings at the side to give a satisfactory grip. The grips of the hand openings at the head and foot are tapering, and are larger than those at the sides. They inclose the frame, at the openings, and are 5 inches long, with a diameter of about 1¼ inches at the center, tapering off toward the ends, where they have a diameter of about three-fourths of an inch. At the head of the litter is an opening in the mesh for attaching the tackle hook in up-ending a patient. The wire of the frame is here doubled and there is a slight undulation in the frame.

There are four cross braces and two longitudinal braces which give rigidity to the horizontal piece. The latter also serve as runners when the litter is used as a sled. The mesh, which is clear of these braces, is thrown up in a fold between the legs, forming two leg gutters; in these we have two wire-gauze splints, and with the adjustable foot piece two complete fracture boxes as well.

With the foot secured to the foot piece inward and outward rotation can be prevented in handling patients with fractures of the femur.

The mesh is sufficiently pliable to be shaped to the part it contains and is rigid enough for effective splinting.

The foot piece consists of a shoe-shaped piece of galvanized steel somewhat wider than the foot with a linear slot on each side for the passage of the securing bandage. It is secured to the mesh at any point by means of three rigid snap catches, and it can be raised and lowered in the gutters at will. When not in use it can be turned flush with the sides of the leg gutters and snapped into the mesh in that position. It is considered a very important part of the apparatus.

Pl. 53. Par. 188.—The Navy Litter (Stokes Splint Stretcher.)

On each side of the leg gutters, and running the entire length, is a small chain secured to the mesh by nine fastenings; between each of these fastenings the chain is clear, and through these clearings bandages can be passed to secure the extremities. Two wide bands of canvas, one at the height of the axillæ, the other at the point of

the hip, secure the thorax and pelvis, respectively. These bands pass through two small chains fitted with snap hooks, the hooks being snapped into the mesh.

The litter can also be used as a sled, and can be slid down ladders from one deck to another with little or no discomfort to the patient. Supported on a tackle hook it can be upended with ease, and in that position a patient can be safely put over the side or sent below through hatches. When the litter is in a perpendicular position the patient keeps his perineum away from the perineal fold by putting his weight on the foot piece on the uninjured side. In case both legs are injured a bandage passed behind the neck over the shoulders and under the arms and secured to the mesh clears the perineum. To pad the perineal fold would be to encourage its use as a saddle when the fragments of broken bones might be crowded together in cases of fracture.

189. This litter like that of the army is usually carried by one squad; two may, however, be used. One bearer can handle the litter when used as a sled. This is done by lifting the head and sliding the litter along on its foot. For loading and unloading two squads are usually required.

190. 1. *Litter*, 2. ***POSTS.***

At *posts*, No. 1 takes position at the foot of the litter with back toward it and No. 2 at the head, both facing the front.

191. 1. *Prepare to lift*, 2. ***LIFT.***

At the first command the bearers stoop and each grasps the left hand grip with the left hand and the right hand grip with the right hand, and at *lift* stand erect.

192. To carry the litter by four bearers the same commands are used as in pars. 168 and 171.

TO LOAD WITH FOUR BEARERS.

193. 1. *Four bearers*, 2. *Right* (*Left*) *side*, 3. ***POSTS.***

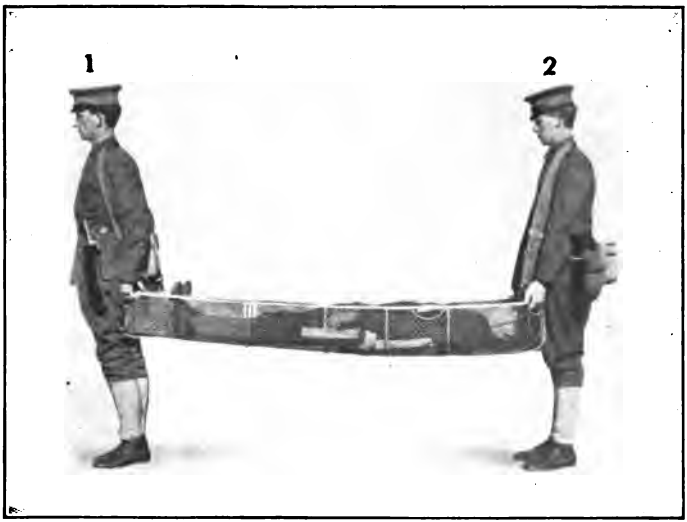
1. *Prepare to lift*, 2. ***LIFT.***

Executed as in pars. 174 and 175.

194. 1. *Lower*, 2. ***PATIENT.***

At this command, the free bearer stoops and assists the other bearers in gently and carefully lowering the patient into the litter, while the lower extremities are supported at a gentle angle above the

ridge separating the gutters. The free bearer then shifts his position, placing himself opposite No. 2, second squad, at the patient's ankle, and kneeling lowers the sound leg into the gutter, while the No. 2, second squad, supports the injured leg. He then passes his hands under the injured leg and assists No. 2, second squad, in lowering it into the gutter. *The legs must be lowered after the body in all cases and the injured leg the last.* This method of lowering the patient into the litter should be followed, even if there be no injury to the extremities.

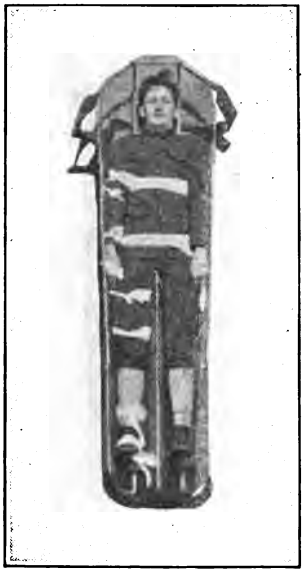


Pl. 54, Par. 191.

The litter being loaded: No. 2, first squad, passes and buckles the upper band, to secure the thorax, while No. 1, second squad, passes and buckles the lower, to secure the pelvis. These bands should be secured before the bearers assist at other duties.

The bandages for securing a fractured arm only are passed by the bearers at the head and hip on the side of the fractured limb, while those for a fracture of the leg are passed by the bearers at the hip and ankle on the side of the fracture.

If there be a fracture of the right arm and right leg. *Bearers at right side, posts.* No. 2 first squad and No. 1 second squad secure the arm bandages, while No. 1 first squad and No. 2 second squad secure those of the leg.



Pl. 55, Par. 194.

If there be a fracture of the left arm and left leg. *Bearers at left side, posts.* No. 2 first squad and No. 1 second squad secure the arm bandages, while No. 1 first squad and No. 2 second squad secure those of the leg.

Should the right arm and left leg be fractured. *Bearers at left side, posts.* No. 2 first squad and No. 1 second squad secure the arm bandages, and No. 1 first squad and No. 2 second squad secure those of the leg.

Should the left arm and right leg be fractured. *Bearers at right side, posts.* No. 2 first squad and No. 1 second squad secure the arm bandages, while No. 1 first squad and No. 2 second squad secure those of the leg.

If both arms be fractured. *Bearers at right side, posts.* Nos. 1 and 2 first squad secure the right arm bandages, and Nos. 1 and 2 second squad those of the left arm.

If both legs be fractured. *Bearers at right side, posts.* No. 1 first squad and No. 2 second squad secure the bandages of the right leg, and No. 1 second squad and No. 2 first squad secure those of the left leg.

If the patient be unconscious, or both legs be injured, a bandage passed behind the neck over the shoulders and under the arms, and secured to the mesh, clears the perineum.

The patient being secured in the litter, positions at *litter posts* (loaded litter) are resumed without command.

In marching with, or carrying, a loaded litter, Nos. 1 and 2 first squad step off with the left foot, and Nos. 1 and 2 second squad with the right foot.

TO UNLOAD.

195. The litter being *lowered:* Posts are taken as in loading and the securing bandages removed from the patient. At the command, 1. *Prepare to lift,* 2. ***LIFT*** (par. 191), when the bearers kneel, the free bearer, having shifted himself to a point opposite No. 2 second squad, first raises the sound leg and supports it on his forearms. No. 2 second squad then raises the injured leg and places it on the palms of the hands of the free bearer, who supports both legs until No. 2 second squad can get his hands and forearms in place under them. The free bearer then resumes his regular post, assists the other bearers in raising the patient upon their knees, and removes the litter. At 1. *Lower,* 2. ***PATIENT,*** all the bearers lower patient to the deck and resume their positions (in ranks) at *litter posts* without command.

The legs must be lifted before the body in all cases, and the injured leg the last. This method of lifting the patient should be followed even if there be no injury to the extremities.

NOTE.—In cold weather a single blanket placed in each leg gutter and running diagonally across the upper part of the litter will add much to the comfort of the patient.

TO LOAD WITH THREE BEARERS.

196. The litters being *lowered,* and the squads at *litter posts:* 1. *Three bearers,* 2. *Right* (*Left*) *side,* 3. ***POSTS.***

If the command is *right side, posts,* No. 1 first squad takes position at the patient's right ankle, No. 2 at his right shoulder, and No. 1 second squad at his left hip.

If the command is *left,* No. 1 first squad takes position at the patient's left ankle, No. 2 at his left shoulder, and No. 1 second squad at his right hip.

The patient having been lifted by the three bearers, is supported on the knees of the two on one side, while the third places the litter under him. The third or free bearer then passes his forearms under the small of the patient's back and thighs and assists in lowering him into the litter. After the body is lowered the free bearer shifts himself to the patient's ankle, taking position opposite No. 1, and proceeds to lower the legs (par. 194).

197. To unload: Reverse the method of loading.

198. Another method for three bearers in *loading* is as follows: The litters being *lowered,* and the squads at *litter posts:* 1. *Three bearers,* 2. *Hips,* 3. ***POSTS.***

At *posts*, No. 1 first squad takes position opposite the patient's hip, No. 2 opposite his knee, and No. 1 second squad stands by the opposite hip.

At the usual commands the two bearers at the hips stoop, and, raising the patient to a sitting position, place each one hand and arm around his back, and the other hand under the upper part of his thighs. The patient, if able, clasps his arms around their necks. No. 2 supports the lower extremities with both arms passed under them, one above, the other below the knee. After the body of the patient has been lowered into the litter, the third bearer, No. 1 second squad, kneels opposite the bearer, supporting the legs, lowers sound leg, and then assists in lowering the injured leg.

199. To unload: Reverse the method of loading.

TO CARRY THE LOADED LITTER THROUGH A NARROW DOORWAY.

FOUR BEARERS AT THE LIFT.

200. On approaching a doorway too narrow for the above formation the litter is halted and the command given:

1. *Doorway*, 2. ***POSTS***, 3. ***MARCH***.

At the second command No. 2, second squad, assists No. 2, first squad, to shift his position to the head of the litter, where he faces it and seizes both grips; No. 1, second squad, assists No. 1, first squad, to assume a similar position at the foot of the litter. At the third command the second squad eases and steadies the litter through the doorway, No. 1 preceding and No. 2 following the litter.

The litter is then halted.

201. 1. *Four bearers*, 2. *Litter*, 3. ***POSTS***, 4. ***MARCH***.

At *posts* the second squad assists the bearers of the first squad to resume their former positions, and then take their posts. All having resumed their posts at the litter, step off at the fourth command.

With *two bearers:* The bearers halt on approaching the doorway and lower litter; they then seize the grips (head and foot) on the side of the injury, turn the litter on its side, and either slide or carry it through the doorway. If there be no injury, the litter is turned on its most convenient side for passing through the doorway.

TO HOIST THROUGH A HATCHWAY WHERE THERE IS NO LADDER SHIPPED.

FOUR BEARERS AT THE LIFT.

202. On arriving at hatchway, the litter having been wheeled about, halted and lowered:

1. *Prepare to hoist*, 2. ***HOIST.***

At the first command the Nos. 2 make their way to the deck above and send down a rope's end prepared for the purpose, which is attached by No. 1, first squad, to the head of the frame at the center opening.

At the second command, the Nos. 2 pull on the rope from the deck above. As soon as the head begins to rise the Nos. 1 take hold of the foot of the litter on their respective sides, keeping it in as nearly a horizontal position as possible while assisting in lifting. As soon as the head of the frame can be reached from the deck above the Nos. 2 draw the litter over the coaming of the hatch until the foot of the litter rests there, when the Nos. 1 make their way on deck. No. 1, first squad, unbends the rope's end and all resume their posts at the litter.

TO LOWER THROUGH A HATCHWAY, NO LADDERS BEING SHIPPED.

203. Loaded litter halted at *lift* at the hatchway:

1. *Prepare to lower*, 2. ***LOWER.***

At the first command, the foot of the litter is rested on the coaming, and the Nos. 1 release their hold on their grips and assist in sliding the litter over the coaming until it rests on its middle. No. 1 first squad then fastens the rope's end to the head of the frame; both Nos. 1 make their way to the deck below, the litter being supported by the Nos. 2.

At the second command, the Nos. 2, with one hand on the head of the frame and the other under the litter, on their respective sides, slide it over the coaming, allowing the foot to slowly drop until it can be reached by the Nos. 1. Then the Nos. 2 lift the head clear of the coaming by the attached rope and lower slowly, the Nos. 1 meanwhile steadying and keeping the litter in as nearly a horizontal position as possible, easing it to the deck below, where it rests; the Nos. 2 then go below, No. 1 first squad unbends the rope's end, and all resume their posts at the litter.

TO TRANSPORT FROM BELOW TO UPPER DECK THROUGH HATCHWAY OVER LADDER SHIPPED.

FOUR BEARERS AT THE LIFT.

204. Loaded litter wheeled about and halted at foot of ladder:

1. *Prepare to hoist up ladder*, 2. ***HOIST.***

At the first command, the litter is raised by the Nos. 2 until it rests on the highest step that they can reach; No. 1 second squad shifts his position to the end, at the foot, and seizing both grips, supports it; the Nos. 2 now make their way to the deck above and send down the rope's end which is attached to the head of the frame by No. 1 first squad.

At the second command, the Nos. 2 pull on the rope, No. 1 first squad attends to the head of the litter, and assists in lifting; No. 1 second squad gradually lowering the foot until the entire length of the litter rests on the ladder. No. 1 first squad now proceeds on deck and assists in hoisting; No. 1 second squad follows the foot up the ladder, and, as the head is lifted from contact with it, prevents the foot from bumping on the steps. As the head reaches the hatch coaming, the litter is drawn over it by the Nos. 2 at their respective sides and No. 1 first squad on the rope; No. 1 second squad lifting the foot and assisting in easing it, until it rests on the coaming; No. 1 second squad makes his way on deck. No. 1 first squad unbends the rope's end, and all resume their posts at the litter.

TO TRANSPORT THROUGH A HATCH TO DECK BELOW, LADDERS BEING SHIPPED.

205. Loaded litter halted at *lift* at head of ladder:

1. *Prepare to lower*, 2. ***LOWER.***

At the first command the Nos. 1 rest the foot on the hatch coaming and assist in sliding the litter until it rests nearly on its middle; No. 1 first squad then fastens the rope's end to the head of the frame, the Nos. 1 make their way to the deck below, and the Nos. 2 support the head.

At the second command the Nos. 2, with one hand on the head of the frame and the other under the litter, on their respective sides, slide it over the coaming, allowing the foot to slowly drop; the Nos. 1 on the ladder below steady the foot, and assist in lowering the litter until it lies flat on the ladder, in which position it is slid to the deck below, the Nos. 2 easing it by means of the

rope, and following it; the Nos. 1 seize the foot by the grips and slightly raise it as it slides over the deck, the Nos. 2 ease the head, as it descends, preventing bumping.

When the litter rests its entire length on the deck, No. 1 first squad unbends the rope's end, and all resume their posts at the litter.

TO TRANSPORT FROM BELOW TO THE UPPER DECK THROUGH HATCHWAY OVER BOARD REACHING DIAGONALLY ACROSS THE HATCHES FROM ONE DECK TO ANOTHER.

206. Loaded litter wheeled about, and halted at *lift* at foot of board:

1. *Prepare to hoist up board*, 2. ***HOIST.***

At the first command, the litter is raised by the Nos. 2 until it rests at the highest point on the board that they can reach; No. 1 second squad shifts his position to the end, at the foot, and seizing both grips supports it; the Nos. 2 now make their way to the deck above and send down the rope's end, which is attached to the head of the frame by No. 1 first squad.

At the second command the Nos. 2 pull on the rope, No. 1 of the first squad attends to the head of the litter and assists in lifting, No. 1 second squad gradually lowering the foot until the entire length of the litter rests on the board. No. 1 first squad now proceeds on deck and assists in hoisting. No. 1 second squad steadies the litter as far as he can reach and then makes his way on deck. As the head reaches the hatch coaming the litter is drawn over it by the Nos. 2 at their respective sides and No. 1 first squad on the rope; No. 1 second squad lifting the foot and assisting in easing it, until it rests on the coaming, No. 1 first squad unbends the rope's end, and all resume their posts at the litter.

TO TRANSPORT THROUGH A HATCH, TO DECK BELOW, OVER BOARD REACHING DIAGONALLY ACROSS THE HATCHES, FROM ONE DECK TO ANOTHER.

207. Loaded litter halted at *lift* at head of board:

1. *Prepare to lower*, 2. ***LOWER.***

At the first command the Nos. 1 rest the foot on the hatch coamings and assist in sliding the litter until it rests nearly on its middle; No. 1 first squad then fastens the rope's end to the head of the frame, the Nos. 1 make their way to the deck below, and the Nos. 2 support the head.

At the second command the Nos. 2, with one hand on the head of the frame and the other under the litter, on their respective sides, slide it over the coaming, allowing the foot to slowly drop; the Nos. 1 on the deck below steady the foot and assist in lowering the litter until it lies flat on the board, in which position it is slid to the deck below, the Nos. 2 easing it by means of the rope; the Nos. 1 seize the foot by the grips and slightly raise it as it slides over the deck. When the litter rests its entire length on deck the Nos. 2 make their way below, No. 1 unbends the rope's end, and all resume their posts at the litter.

208. If only two *trained* bearers are available they should be detailed as Nos. 1 and 2 first squad, two additional bearers, untrained, being secured for the second squad. In such cases the litter may be handled very well if their duties are explained to the untrained bearers as the movements are executed.

METHODS OF REMOVING WOUNDED WITHOUT LITTER.

BY THE RIFLE SEAT.

209. A good seat may be made by running the barrels of two rifles through the sleeves of an overcoat, turned inside out and buttoned up, sleeves in, so that the coat lies back up, collar to the rear. The front bearer rolls the tail tightly around the barrels and takes his grasp over them; the rear bearer holds by the butts, trigger guards up.

210. A stronger seat is secured in the following manner: A blanket being folded once from side to side, a rifle is laid transversely upon it across its center, so that the butt and muzzle project beyond the edges; one end of the blanket is folded upon the other end and a second rifle laid upon the new center, in the same manner as before. The free end of the blanket is folded upon the end containing the first rifle, so as to project a couple of inches beyond the first rifle. The litter is raised from the ground with trigger guards up.

BY ONE BEARER.

211. A single bearer may carry a patient in his arms or on his back.

In instructing a detachment in these movements, the detachment being in line, the patients are directed to lie down in front of the bearers.

212. 1. *In arms*, 2. ***LIFT.***

At *lift*, each bearer, turning patient on his face, steps astride his body, facing toward the patient's head, and with hands under his armpits lifts him to his knees; then clasping hands over abdomen, lifts him to his feet; he then with his left hand seizes the patient by the left wrist and draws left arm around his (the bearer's) neck and holds it against his left chest, the patient's left side resting against his body, and supports him, with his right arm about the waist.

Pl. 56, Par. 212.

From this position the bearer with his right arm upon the patient's back, passes his left under thighs and lifts him into position, carrying him well up.

Pl. 57, Par. 212.

213. 1. *Across back*, 2. ***LIFT.***

At *lift*, the patient is first lifted erect as described in previous paragraph, when the bearer with his left hand seizes the right wrist of the patient and draws the arm over his head and down upon his left shoulder, then shifting himself in front, stoops and clasps the right thigh with his right arm passed between the legs, his right hand seizing the patient's right wrist; lastly the bearer with his left hand grasps the patient's left and steadies it against his side, when he rises.

214. 1. *Astride of back*, 2. ***LIFT.***

At *lift*, the patient is lifted erect (as described), when the bearer shifts himself to the front of the patient, back to patient, stoops and grasping his thighs, brings him well upon his back.

Pl. 58, Par. 213.

As the patient must help himself by placing his arms around the bearer's neck, this method is impracticable with an unconscious man.

215. In lowering the patient from these positions the motions are reversed. Should the patient be wounded in such a manner as to require these motions to be conducted from the right side instead of left, as laid down, the change is simply one of hands—the motions proceed as directed, substituting right for left and *vice versa*.

BY TWO BEARERS.

216. Besides the methods (already described) for carrying patient to litter.

Pl. 59, Par. 214.

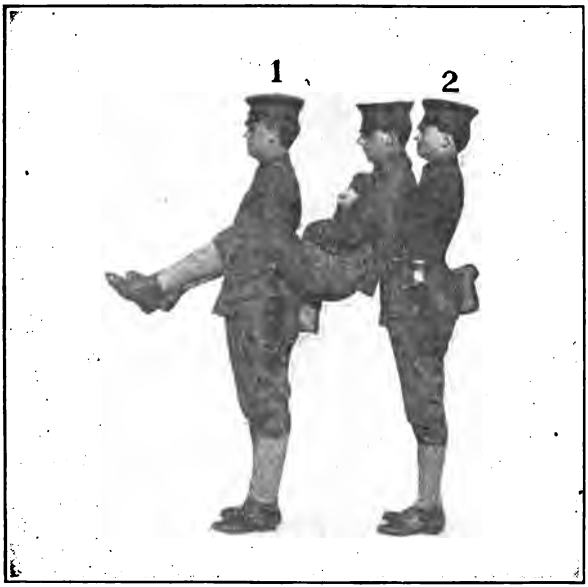
By the extremities:

1. *Head and feet*, 2. ***POSTS.***

At *posts*, bearers take position at patient, No. 1 between the patient's legs and No. 2 at his head, both facing toward his feet.

1. *Prepare to lift*, 2. ***LIFT.***

At the first command, the rear bearer having raised the patient to a sitting posture, clasps him from behind around the body under



Pl. 60, Par. 216.

the arms, while the front bearer, standing between the legs, passes his hands from the outside under the flexed knees. At *lift*, both rise together.

This method requires no effort on the part of the patient; but is not applicable to severe injuries of the extremities.

TO PLACE A PATIENT ON HORSEBACK.

217. The help required to mount a disabled man will depend upon the site and nature of his injury; in many cases he is able to help himself materially. The horse, blindfolded if necessary, to be held by an attendant.

Pl. 61, Par. 217.

To load from the near side, the commands are:

1. *Left side*, 2. ***POSTS.*** 1. *Prepare to lift*, 2. ***LIFT,*** 3. ***MOUNT.***

The patient having been lifted, at *mount*, is carried to the horse, patient's body parallel to that of the horse and close to its side, his head toward the horse's tail. He is then carefully raised and carried over the horse until his seat reaches the saddle, when he is lifted into position. No. 1 goes to the offside and puts the patient's right foot into the stirrup. No. 2 puts the left foot in the stirrup. When necessary to load from the offside, the bearers take posts *right side.* When a patient is entirely helpless two squads may be used, three bearers on one side, while the fourth goes to the offside of the horse.

Pl. 62, Par. 217.

218. To dismount the commands are:

1. *Left side*, 2. ***POSTS.*** 1. *Prepare to dismount*, 2. ***DISMOUNT.***

At *prepare to dismount*, the patient's feet are disengaged from the stirrups and his right leg swung over the pommel, No. 1 going to the offside for the purpose and then resuming his post at the left side. At *dismount*, the patient is brought to a horizontal position, gently lifted over the saddle, and carried backward until free of the horse, when the squad *halts* and *lowers* patient.

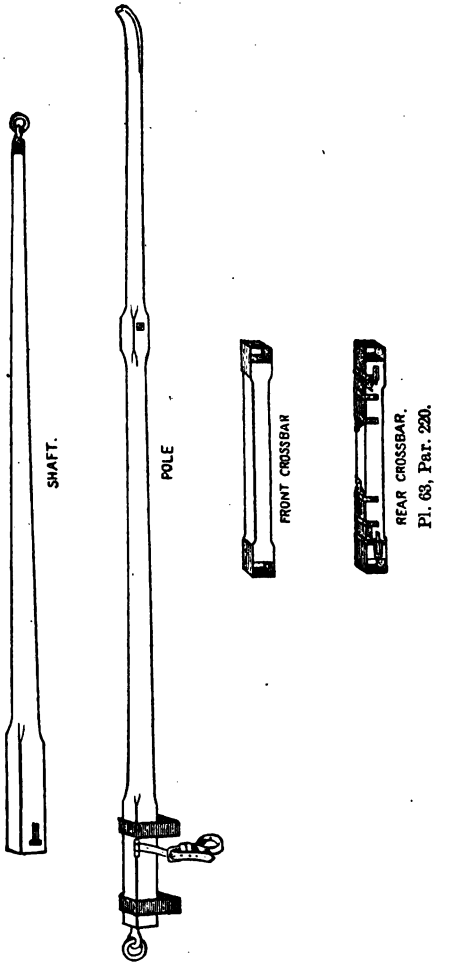
219. The patient once mounted should be made as safe and comfortable as possible. A comrade may be mounted behind him and guide the horse; otherwise a lean-back may be provided, made of a blanket roll, a pillow, or a bag filled with leaves or grass. If the patient be very weak, the lean-back may be made of a sapling bent into an arch over the cantle of the saddle, its ends securely fastened, or of some other framework, to which the patient is bound.

THE TRAVOIS.

220. The travois is a vehicle intended for transporting the sick or wounded when the use of wheeled vehicles or other means of transportation is impracticable. It consists of a frame, having shafts, two side poles, and two crossbars, upon which a litter may be rested and partly suspended. When in use a horse or a mule is attached to the shafts and pulls the vehicle, the poles of which drag on the ground. One pole is slightly shorter than the other, in order that in passing an obstacle the shock may be received successively by each and the motion distributed.

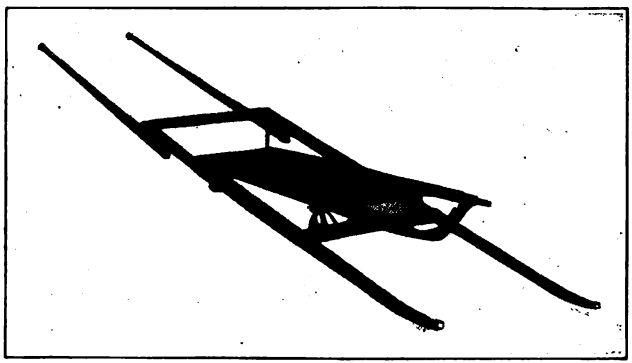
221. *To assemble the travois.*—Pass each shaft through the collar on the travois pole from rear to front, pulling until snugly home. Then pass the front crossbar over the ironed ends on the front of the travois poles, driving it home until its collars strike the front collar of each pole, after which pass the rear crossbar (keeping uppermost the surface on which are the flat bolts) over the rear ends of the poles, pushing it forward until it reaches the squared places beyond the bolt slots, when the front bolts are thrown into place.

222. *To place the litter on the travois.*—If the litter is loaded it is wheeled so that the head of the patient is toward the rear of the travois and two paces from it; it is then halted and lowered. The flat bolts on the rear travois bar are thrown back and slings are secured. The squad takes posts at the side of the litter, as in loading ambulance, and the litter is then carried lengthwise over the travois until the front of the litter rests upon the rear crossbar, when the handles are passed through the leather loops, the legs set in the mortises and secured by the bolts.



Pl. 63, Par. 220.

223. A travois may be improvised by cutting poles about 16 feet long and 2 inches in diameter at the small end. These poles are laid parallel to each other, large ends to the front, and 2½ feet apart; the small ends about 3 feet apart, and one of them projecting about 8 or 10 inches beyond the other. The poles are connected by a crossbar about 6 feet from the front ends and another about 6 feet back of the first, each notched at its ends and securely lashed at the notches to the poles. Between the crosspieces the litter bed, 6 feet long, is filled in with canvas, blanket, etc., securely fastened to the



Pl. 64, Par. 222.

poles and crossbars, or with rope, lariat, rawhide strips, etc., stretching obliquely from pole to pole in many turns, crossing each other to form the basis for a light mattress or an improvised bed; or a litter may be made fast between the poles to answer the same purpose. The front ends of the poles are then securely fastened to the saddle of the animal. A breast strap and traces should, if possible, be improvised and fitted to the horse. On the march the bearers should be ready to lift the rear end of the travois when passing over obstacles, crossing streams, or going up hill.

THE AMBULANCE.

224. The ambulance is a four-wheeled vehicle, ordinarily drawn by two animals in garrison and four in the field. It provides transportation for eight men sitting or four recumbent on litters, or four sitting and two recumbent. It is fitted with four removable seats, which, when not used as such, are hung, two against each side. The arrangements for supporting the upper tier of litters (upper berths) consist of two litter-supporting posts and four straps. The litter-supporting posts are two uprights, placed 73 inches apart. The one in front is stationary, being secured to the roof and floor; the one at the rear is hinged at the top, and when the upper berths are not to be used it is strapped to the roof. When the upper berths are to be used, it is unstrapped and swung into a vertical position, when its lower end is secured to the floor by a slot and bolt. Fastened to each of the litter-supporting posts, 27¾ inches from the floor, is a socket for the inside handles of the litter, and opposite each socket, attached to the side of the ambulance, is a strap to hold the outside handles. The floor is 7½ feet long and 4 feet wide.

Spare parts and additional articles are carried by each ambulance. (See M. M. D.)

In the field there should be an orderly with each ambulance, who rides on the seat beside the driver. When the orderly is present, it is his duty to open and close the tail gate, raise and lower the curtain (when necessary), and as far as practicable, to prepare the interior of the ambulance before the patients arrive. He may also assist in loading and unloading.

AMBULANCE DRILLS.

225. The litters are said to be *packed* when they are strapped and placed upon the brackets. The seats are said to be *prepared* when they are horizontal, supported by the legs; and *packed* when they are hooked against the sides of the wagon.

Pl. 65, Par. 226.

TO TAKE POSTS AT AMBULANCE.

226. The squad being in the vicinity of the ambulance:

1. *Ambulance,* 2. ***POSTS.***

At *posts,* No 1 takes position one pace behind the left rear wheel, and No. 2 one pace behind the right rear wheel, both facing the ambulance.

In case of a litter lowered in rear of an ambulance preparatory to loading, head of patient toward it, at the command *posts* each bearer faces about and proceeds directly to his post.

Pl. 66, Par. 227. Preparing the second seat.

This is the invariable position of the squad at *ambulance posts;* it may be taken from any position (the litter, if used being *grounded* or *lowered*), and when disarranged from whatever cause the squad may be reassembled by these commands for service at the ambulance.

227. The ambulance having seats packed and the squad being at *ambulance posts:*

1. *Prepare,* 2. ***SEATS.***

At *seats,* Nos. 2 and 1 open the tail gate, raise the curtain if necessary, and enter the ambulance, No. 2 facing the front and No. 1 the rear seat of their respective sides. Each man seizes the lower edge of his seat about 6 inches from the ends with both hands and lifts it to free the hooks from the upper slots and then slips them into the lower slots; he then lowers the legs and adjusts them to the floor, and tries the seat for firmness before leaving it. He then prepares in like manner the opposite seat. No. 1 unfastens the litter-supporting post and swings it to the front of the ambulance, where it is grasped by No. 2, who lifts it to its place and straps it. Nos. 1 and 2 now resume their positions at *ambulance pos s* and close the tail gate.

228. The ambulance having seats *prepared,* the squad being at *ambulance posts:*

1. *Pack,* 2. ***SEATS.***

At *seats,* Nos. 2 and 1 open the tail gate and raise the curtain, if necessary. They then enter the ambulance and face the front and rear seats of their respective sides; each man releases the legs and secures them against the seats, then seizing the front of the seat with both hands raises the seat to clear the hooks from the lower slots and slips them into the upper slots; he then lowers the seat to the side of the ambulance and packs in like manner the opposite seat. No. 2 unfastens the strap which holds the litter-supporting post to the roof of the ambulance and swings it to No. 1, who places it firmly in its socket. Nos. 1 and 2 now resume their positions at ambulance posts and close the tail gate, unless a litter is to be loaded.

229. Seats may be *prepared* or *packed* on one side only (leaving room on the packed side for two recumbent patients) by the commands:

1. *Right* (*Left*) *prepare,* 2. ***SEATS.***

230. The right side of the ambulance is always loaded or unloaded first, unless otherwise ordered. With but two recumbent patients, the lower berths only are loaded.

Pl. 67, Par. 232.

TO LOAD THE AMBULANCE.

231. The litter being *lifted*, is marched to the rear of the ambulance, wheeled about so that the head of the patient is toward the step and one pace from it, and then *halted* and *lowered*. If it be necessary to prepare the ambulance before loading, the squad by command takes positions at *ambulance posts*.

Pl. 68, Par. 232.

1. *At sides of litter*, 2. ***POSTS.***

The tail gate having been opened, at *posts* Nos. 1 and 2 take positions on the right and left, mid-length of the litter, facing it.

232. 1. *Lower* (*Upper*) *berth, prepare to load*, 2. ***LOAD.***

At the first command the bearers stoop and each grasps a pole firmly with both hands.

At *load* the litter is lifted until the stirrups rest upon the floor of the ambulance and then pushed in.

If the patient is heavy and the bearers light, the litter is only raised high enough to rest the handles on the floor of the ambulance; No. 1 then shifts his hands along his pole until he reaches his handles which he supports, while No. 2 gets into the ambulance, lifts the head of the litter until the stirrups rest on the floor, and together they pull and push the litter into place. No. 1 then places

the arms and accouterments of the patient in the ambulance, and both close the tail gate.

233. If the upper berth is to be loaded, the tail gate is left open, No. 2 runs to the front of the ambulance, climbs in, stepping over

Pl. 69, Par. 233.

the seat, faces the litter, and grasps the head handles. No. 1 mounts the rear step and grasps his handles. The litter is then lifted, the inside handles being placed in the receiving sockets first, the outside handles then being secured by the straps. No. 2 steps over

the front seat, jumps to the ground, and the squad takes position at *ambulance posts* and closes the tail gate, unless the ambulance is to be unloaded at once.

TO UNLOAD THE AMBULANCE.

234. The squad being at *ambulance posts:*

1. *Lower (Upper) berth, prepare to unload,* 2. ***UNLOAD.***

The tail gate having been opened, at the first command each bearer grasps the handle nearest him. At *unload,* the bearers partly withdraw the litter, then shifting their hands to their respective poles and facing each other, they continue to withdraw it until the rear stirrups reach the tail gate, when they lift the litter out, *halt* and *lower* it to the ground one pace in rear of the tail gate.

If the patient is very heavy the rear handles should be carefully lowered to the floor of the ambulance before the litter is lifted out.

The bearers having closed the tail gate, take positions at *litter posts* without command.

235. If the upper berth is to be unloaded, at the first command No. 2 runs to the front of the ambulance, climbs in, stepping over the front seat, and stands between the handles of the litter facing the rear; No. 1 mounts the rear step, facing the front. Each bearer grasps his handles. At *unload,* the handles are lifted and freed from their fastenings, first from the straps and then from the sockets. The litter is then lowered to the floor of the ambulance, from which position it is withdrawn as in the previous paragraph. The tail gate having been closed, the squad takes position at *litter posts* without command.

236. When for any reason it is necessary to use three bearers in loading or unloading, the commands *at sides of litter, posts* are not given. At the commands *three bearers, upper (lower) berth, prepare to load,* the additional bearer takes post outside the left handle, at the head of the litter opposite No. 2, who steps outside the right handle. Both face the litter, stoop and grasp their respective poles. No. 1 faces about, stoops and grasps his handles. At *load* the litter is lifted and pushed into the ambulance. If the upper berth is to be loaded the additional bearer now mounts the step with No. 2 and assists in lifting the litter into position. In unloading, these movements are reversed.

237. When necessary to load feet first, the litter is *not* wheeled about when it reaches the rear of the ambulance but is halted and lowered with feet toward the tail gate, when the movements proceed as in previous paragraphs.

Pl. 70, Par. 236.

238. At the conclusion of the drill with ambulances the detachment is re-formed in line.

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TO PREPARE AND LOAD ORDINARY WAGONS TO TRANSPORT WOUNDED.

239. In active service the use of ordinary army or other wagons for transporting the sick and wounded is of everyday occurrence, and it is important that bearers should be practiced in preparing, loading, and unloading such vehicles. Patients may be laid on straw or other like material spread thickly over the bottom of the wagon, or on hand litters placed on the bottom, or suspended by ropes or straps. The movements heretofore fully described, to *load* and *unload*, will, if thoroughly understood, meet the requirements of any emergency of this character. It must, however, always be remembered that such work demands a far greater amount of care on the part of the bearers for the safety and comfort of their patients than when the proper appliances are at hand.

CEREMONIES.

INSPECTIONS.

Detachment and company inspection.

240. Inspection is in such uniform as may be prescribed.

241. The detachment should frequently be inspected in field equipment.

Pl. 71, Par. 241.

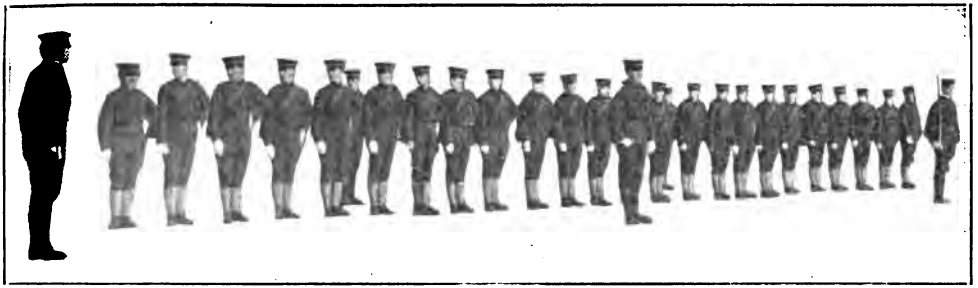
Pl. 72, Par. 241.

242. The detachment being formed, the senior noncommissioned officer salutes, reports, and takes his place on the right of the line of file closers. The junior officers take their posts and draw sabers as soon as the noncommissioned officer has reported.

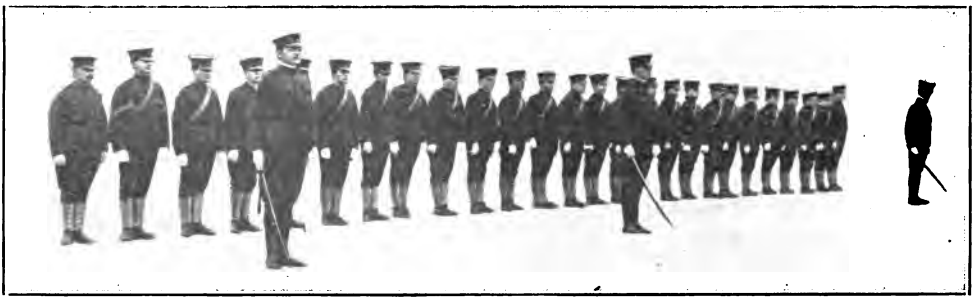
The officer commanding then draws saber and commands:

1. *Prepare for inspection*, 2. ***MARCH***, 3. ***FRONT***.

At the first command the junior officers place themselves on the right and left of the rank; the officer commanding then places himself facing to the left, three paces in front of and two paces to the right of the detachment, and commands: *march*. At this command the junior officers move forward three paces, face to the center in marching, and upon arriving opposite their posts, halt, face to the front and dress to the right; the rank (the left hand upon the hip) dresses to the right, the file closers dress to the right.



Pl. 73, Par. 242.



Pl. 74, Par. 242.

The officer commanding aligns the officers and the rank; the senior noncommissioned officer the file closers; the officer commanding verifies the alignment of the file closers. The officers and file closers turn their heads and eyes to the front as soon as their alignment is verified.

At the command *front*, the junior officers bring their sabers to the order; the detachment commander takes post facing to the front, three paces in front of the right guide.

243. To inspect knives the detachment commander then faces about and commands:

1. *Inspection*, 2. ***KNIVES.***

He then returns saber, passes along the rank and file closers, and makes the inspection.

At the command *knives*, the junior officers carry saber, and when the inspection of the rank begins, face about, order saber, and stand at ease; they may be directed to accompany the detachment commander or assist in the inspection.

Each enlisted man in turn as the inspector approaches him grasps the handle of his knife with the right hand and the scabbard with the left, draws the knife, presents it as in paragraph 253, turns the edge to the front and to the right to show the other side of the blade, and after the knife is inspected returns it.

Commencing on the right the inspector inspects the knife of each soldier in succession and at the same time notes the condition of his person, clothing, and accouterments.

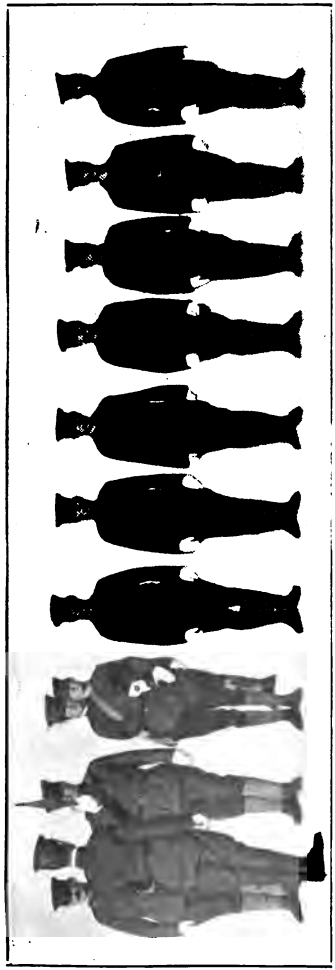
244. Inspection of the knives completed, the detachment commander again places himself three paces in front of the right guide and facing the front draws saber, faces about, commands:

1. *Inspection*, 2. ***POUCHES,***

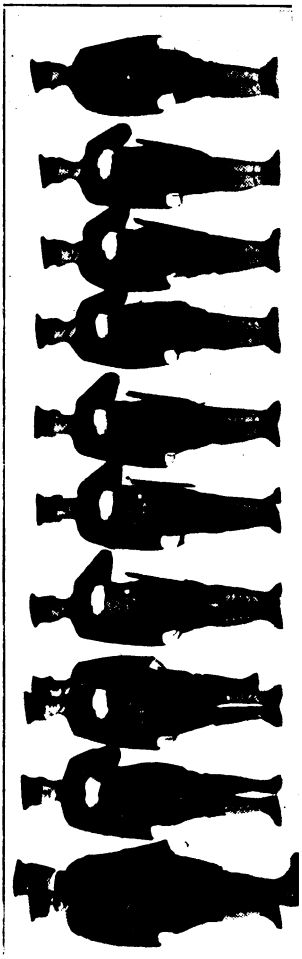
and returns saber.

At the second command the pouches are shifted under the right arm to the front, the flap opened and strap held by the left hand (fingers extended and joined, palm of hand and elbow against the body), so that the flap strap covers the line of buttons, right hand at side.

Commencing on the right, the inspector now proceeds to minutely inspect the pouch of each soldier in succession. After the inspector has passed, each man closes and replaces the pouch.



Pl. 75, Par. 243.



If the pouches are not inspected they are replaced by the commands:

1. *Close*, 2. ***POUCHES.***

245. The inspection being completed, the junior officers come to attention, carry saber, and face to the front; the officer commanding again takes his post on the right, and directs that the detachment be *dismissed.*

The men then return to quarters, remove their headdress and accouterments, and stand near their respective bunks; in camp they stand covered, without accouterments, in front of their tents.

The detachment commander, accompanied by the junior officers, then passes through and inspects the quarters. The sergeant precedes the detachment commander and calls the men to *attention* on entering the squad rooms or approaching the tents. The men stand at attention but do not salute.

246. If the inspection is to include an examination of the blanket rolls the officer commanding, before dismissing the detachment and after inspecting the file closers, directs the junior officers to remain in place, *takes intervals* (par. 56) and commands:

1. *Unsling*, 2. ***PACKS,*** 3. *Open*, 4. ***PACKS.***

At the second command, each man unslings his roll and places it on the ground at his feet, rounded end to the front, square end of shelter half to the right.

At the fourth command, the rolls are untied, laid perpendicular to the front with the triangular end of the shelter half to the front, opened, and unrolled to the left; each man prepares the contents of his roll for inspection and resumes the attention.

The officer commanding then returns saber, passes along the rank and file closers as before, inspects the rolls, returns to the right, draws saber, and commands:

1. *Close*, 2. ***PACKS.***

At the second command, each man packs his roll as in paragraph 46.

As soon as a squad completes its two rolls each man places his roll in the position it was after being unslung, and stands at attention.

All the rolls being completed the commanding officer commands:

1. *Sling*, 2. ***PACKS.***

At the second command, the rolls are slung, the end containing the pole to the rear.

The commanding officer then assembles the detachment and completes the inspection as before.

247. Should the inspector be other than the detachment commander the latter prepares the detachment for inspection, and when the inspector approaches, brings it to attention, faces to the front and salutes in person. The salute acknowledged, the detachment commander carries saber, faces about, commands:

1. *Inspection*, 2. ***KNIVES,***

and again faces to the front.

The inspection proceeds as before; the detachment commander returns saber and accompanies the inspector as soon as the latter passes him.

INSPECTION OF LITTERS AND AMBULANCES.

248. The detachment being in line with strapped litters at the *carry*, and intervals taken, the commands are given:

1. *Litters left* (*right*), 2. ***MARCH,*** 3. ***HALT.*** 1. *Inspection*, 2. ***LITTERS.***

At *litters*, the litters are opened, held suspended until both sides are inspected, and then lowered, when the squads take positions at *litter posts* without command.

249. The ambulances being in line at intervals of ten paces, with seats *packed*, an orderly on each seat beside the driver, the commands are given:

1. *Inspection*, 2. ***AMBULANCES.***

At the second command the orderly jumps down, runs to the rear of the ambulance, opens the tail gate and raises the curtain, if necessary, and then comes to *attention* two paces in rear of the center of the step, facing the ambulance. The inspector first examines the animals and harness, then the ambulance and contents, after which he directs the seats to be prepared, or such other work to be done as he desires executed.

The inspection being completed, the orderly closes the tail gate and resumes his position on the seat beside the driver.

MUSTER.

Detachment and company muster.

250. All stated musters of the detachment are, when practicable, preceded by a minute and careful inspection. The detachment being in line prepared for inspection, the officer commanding, upon intimation of the mustering officer, commands: *Attention to muster.*

He then returns saber and hands a roll of the hospital corps detachment, with a list of absentees, to the mustering officer. The mustering officer or the officer commanding calls over the names on the roll. Each man, as his name is called, answers "Here," and steps forward one pace. The muster completed, the detachment is dismissed.

After mustering, the presence of the men reported sick in hospital or on duty elsewhere is verified by the mustering officer, who is accompanied by the officer commanding.

MANUAL OF THE SABER FOR OFFICERS.

251. 1. *Draw*, 2. ***SABER.***

At the command *draw*, unhook the saber with the thumb and first two fingers of the left hand, thumb on the end of the hook, fingers lifting the upper ring; grasp the scabbard with the left hand at the upper band, bring the hilt a little forward, seize the grip with the right hand, and draw the blade 6 inches out of the scabbard, pressing the scabbard against the thigh with the left hand.

Pl. 77, Par. 251.

Pl. 78, Par. 251.

Pl. 79, Par. 251.

At the command *saber*, draw the saber quickly, raising the arm to its full extent to the right front, at an angle of about 45 degrees, with the horizontal, the saber, edge down, in a straight line with the

arm; make a slight pause and bring the back of the blade against the shoulder, edge to the front, arm nearly extended, hand by the side, elbow back, third and fourth fingers back of the grip; at the same time hook up the scabbard with the thumb and first two fingers of the left hand, thumb through the upper ring, fingers supporting it; drop the left hand by the side.

This is the position of carry saber dismounted.

Officers unhook the scabbard before mounting; when mounted, in the first motion of *draw saber*, they reach with the right hand over the bridle hand and, without the aid of the bridle hand, draw the saber as before; the right hand at the *carry* rests on the right thigh.

On foot, officers carry the scabbard hooked up.

252. When publishing orders, the saber is held suspended from the right wrist by the saber knot; when the saber knot is used, it is placed on the wrist before drawing saber, and taken off after returning saber.

253. Being at the order or carry:

1. *Present*, 2. ***SABER*** (or ***ARMS***).

Pl. 80, Par. 253.

At the command *present*, raise and carry the saber to the front, base of the hilt as high as the chin and 6 inches in front of the neck, edge to the left, point 6 inches farther to the front than the hilt, thumb extended on the left of the grip, all the fingers grasping the grip.

At the command *saber* (or *arms*), lower the saber, point in prolongation of the right foot, and near the ground, edge to the left, hand by the side, thumb on left of grip, arm extended. If mounted, the hand is held behind the thigh, point a little to the right and front of the stirrup.

In rendering honors with troops, officers execute the first motion of the salute at the command *present*, the second motion at the command *arms;* enlisted men with the sword execute the first motion at the command *arms* and omit the second motion.

254. Being at a carry:

1. *Order*, 2. ***SABER*** (or ***ARMS***).

Drop the point of the saber directly to the front, point on or near the ground, edge down, thumb on back of grip.

Pl. 81, Par. 254.

Pl. 82, Par. 256.

Pl. 83, Par. 257.

Being at the *present saber*, should the next command be *order arms*, officers *order saber;* if the command be other than *order arms*, they execute *carry saber.*

When arms are brought to the order, the officers or enlisted men, with the saber or sword drawn *order saber.*

255. The saber is held at the *carry* while giving commands, marching, at attention, or changing position in quick time.

When at the order, sabers are brought to the carry when arms are brought to any position except the present or parade rest.

256. Being at the order:

1. *Parade*, 2. ***REST.***

Take the position of parade rest except that the left hand is uppermost and rests on the right hand, point of saber on or near the ground in front of the center of the body, edge to the right.

At the command *attention*, resume the order saber and the position of the soldier.

257. In marching in double time, the saber is carried diagonally across the breast, edge to the front; the left hand steadies the scabbard.

258. Officers on all duties under arms draw and return saber without waiting for command. All commands to soldiers under arms are given with the saber drawn.

259. Being at a carry:

1. *Return*, 2. ***SABER***

Pl. 84, Par. 259.

At the command *return*, carry the right hand opposite to and 6 inches from the left shoulder, saber vertical, edge to the left; at the same time unhook and lower the scabbard with the left hand, and grasp it at the upper band.

At the command *saber*, drop the point to the rear and pass the blade across and along the left arm; turn the head slightly to the left, fixing the eyes on the opening of the scabbard, raise the right hand, insert and return the blade; free the wrist from the saber knot (if inserted in it), turn the head to the front, drop the right hand by the side, hook up the scabbard with the left hand, drop the left hand by the side.

Officers, mounted, return saber without using the left hand; the scabbard is hooked up on dismounting.

260. At inspection, enlisted men with the sword drawn execute the first motion of *present saber*, and turn the wrist to show both sides of the blade, resuming the carry when the inspector has passed.

POSITION OF THE MEDICAL DEPARTMENT ON THE MARCH AND IN CAMP.

261. The regimental medical officers will habitually accompany their regiment, the senior with the commander at the head, one junior with the ambulance at the rear, the other at the rear of the leading battalion.

On ordinary marches the field hospitals will march in rear of the last regiment of the division.

When an engagement is in prospect the personnel for a dressing station, with pack transportation to carry the equipment, will march at the rear of each brigade. With exception of the parts of the ambulance company sections thus detached, the field hospitals will ordinarily march at the rear of the division; but when there are several divisions in one column, one field hospital from each division would usually be held in reserve and march with the "second line" of ammunition columns and trains—that is, a short day's march in rear.

The regimental ambulances will rejoin the ambulance company sections before an engagement.

TENT DRILL.

262. The canvas for each field hospital when in fixed camp consists of 31 hospital tents and 5 wall tents, as follows:

	Hospital tents.
Wards	18
Noncommissioned officers	2
Privates	6
Operating room, dispensary, supplies, stores, cook, 1 each	5
	31

	Wall tents.
1 for each officer	5

HOSPITAL TENT.

263. A hospital tent is 14 feet 4 inches long, 14 feet 6 inches wide, and 11 feet to ridge, the wall being 4½ feet high; it furnishes comfortable accommodations for six patients, and requires to pitch it a ridgepole and two upright poles, seven long tent pins on each side for the guy ropes, and two on each side for the long guys, eighteen in all. Twenty-eight small pins are needed for the front, rear, and walls.

264. The hospital tents should always be pitched first in a field hospital.

265. The tents having been pitched, should at once be ditched, unless otherwise directed. In setting or removing wall pins the work should commence at the corners of the tent, working first on the sides and then on the ends.

266. Two squads (four men), numbered from 1 to 4 consecutively, pitch each tent.

Nos. 1 and 2 place the ridgepole perpendicular to the company street, with one end against the position pin; Nos. 3 and 4 drive a pin at the other end of the ridgepole. Nos. 1 and 2 mark the positions of the four corner guy-rope pins by placing the ridgepole parallel to the company street, to the right (facing the tent)

of the position pin; Nos. 3 and 4 drive a large pin one pace in front of the outer end of the ridgepole. The other three corner guy pins are set in succession in the same manner, going first straight to the rear, then across the tent, and then to the front. All four then spread the tent on the ground it is to occupy; No. 1 at the front and No. 2 at the rear insert the uprights. The ridgepole and uprights are joined, the pole pins inserted in the eyelets of the tent and fly, and the tent raised to a vertical position with the poles at the pins. Nos. 1 and 2 hold the tent in position, No. 3 places the front guy ropes of tent and fly, No. 4, the rear, on their pins, and tighten the same so as to hold the poles vertical. The wall pins are then driven through the loops, walls hanging vertically. The other pins are then driven on line with the corner pins and in prolongation of the seams of the tent.

THE MUNSON TENT.

267. The Munson hospital tent has the same dimensions as the ordinary hospital tent, except that the fly is supported by a jointed ridgepole, below which the tent is suspended by a ridgerope, so as to give an air space of 1 foot between the tent ridge and the fly. The fly has a width of 18 feet, equal to the length of the jointed ridgepole, and projects over the ends of the tent, front and rear, for a distance of 2 feet. In addition to the jointed ridge, two upright poles are required to pitch the tent; and there are also needed nine long tent pins on a side for the fly guys, and seven long tent pins on a side for the tent guys, or 32 in all. If necessary the tent can be pitched with nine long pins on a side, or 18 in all, by attaching the fly guys and tent guys to the same pins; but it is preferable to use two rows of long tent pins, so as to create as large an air space as possible between the tent roof and the fly. As with the common hospital tent, 28 small tent pins are needed for the front, rear, and walls. No long (ridge) guys are required.

The positions for the corner guy-rope pins for the fly are marked by stepping outward one pace and to front (or rear) one pace from the corner guy-rope pins of the tent. When the tent is spread on the ground it is to occupy, the ridgepole is withdrawn from under the tent and placed on the outside about a foot from the ridge. For hot weather, the flap covering the ventilating netting in the roof of the tent is fastened down, so as to leave the ventilating space open. The loop of the ridgerope is slipped over the pin of one of the uprights and the pins of both uprights passed through the holes in the ends of the tent ridge and into the sockets provided for them in the ridgepole. The free end of the ridgerope is then passed around the pin of the second upright, pulled taut, and tied in position. The

three short rope supports are then hooked over the ridgerope through the meshes of the ventilating netting, or through the perforations in the flap closing the ventilating opening, if this flap be used.

NOTE.—In the latest model of the Munson tent the ridgerope is replaced by a strip of canvas running the length of the tent ridge and to which the rope supports are attached by snap hooks. This model has shouldered upright poles which pass through the tent ridge, and short pins to support the tent-fly ridgepole.

268. The wall tent or common tent is pitched in the same manner as a hospital tent.

CONICAL WALL TENTS.

269. The conical wall tent is pitched by four squads (eight men), one of the eight, selected to supervise the work, numbers the others from 1 to 7, and himself takes the number 8.

Upon the hood lines of the tent are placed three marks; the first about 8 feet 3 inches, the second about 11 feet 3 inches, the third about 14 feet 2 inches from the hood ring; the first marks the distance from the center to the wall pins, the second to the guy pins, and the distance between the second and third is the distance between guy pins. These distances vary slightly for different tents and should be verified by actual experiment before permanently marking the ropes. To locate the position of guy pins after the first, the hood ring being held on the center pin, with the left hand hold the outer mark on the pin last set, with the right hand grasp the rope at the center mark and move the hand to the right so as to have both sections of the rope taut; the center mark is then over the position desired; the inner mark is over the position of the corresponding wall pin.

To pitch the tent, No. 1 places the tent pole on the ground, socket end against the door pin, pole perpendicular to the company street. No. 2 drives the center pin at the other extremity of the pole. No. 3 drives a wall pin on each side of and 1 foot from the door pin. No. 4 places the open tripod flat on the ground with its center near the center pin. The whole detachment then places the tent, fully opened, on the ground it is to occupy, the center at the center pin, the door at the door pin.

No. 8 holds the hood ring on the center pin, and superintends from that position. No. 1 stretches the hood rope over the right (facing the tent) wall pin and No. 2 drives the first guy pin at the middle mark. No. 1 marks the position of the guy pins in succession and No. 2 drives a pin lightly in each position as soon as marked. At the same time No. 5 inserts small pins in succession through the

wall loops and places the pins in position against the inner mark on the hood rope, where they are partly driven by No. 6. No. 4 distributes large pins ahead of Nos. 1 and 2; No. 7, small pins ahead of Nos. 5 and 6; No. 3 follows Nos. 1 and 2 and drives the guy pins home. No. 7, after distributing his pins, takes an ax and drives home the pins behind Nos. 5 and 6. No. 4, after distributing his pins, follows No. 3 and loops the guy ropes over the pins.

Nos. 1, 2, and 3, the pins being driven, slip under the tent and place the pin of the pole through the tent and hood rings while No. 8 places the hood in position. Nos. 1, 2, and 3 then raise the pole to a vertical position and insert the end in the socket of the tripod; they then raise the tripod to its proper height, keeping the center of the tripod over the center pin; while they hold the pole vertical Nos. 4, 5, 6, and 7 adjust four guy ropes, one in each quadrant of the tent, to hold the pole in its vertical position, and then the remaining guy ropes. As soon as these are adjusted the men inside drive a pin at each foot of the tripod if necessary to hold it in place.

270. The conical wall tent may also be pitched by two squads (4 men). No. 4 holds the hood ring and superintends. After the tent is in position on the ground it is to occupy, the pins are distributed by Nos. 2 and 3. No. 3 takes the place of Nos. 5 and 6 in placing the wall loop pins. After all the pins are placed they are driven home, all assisting.

SHELTER TENTS.

271. The litters having been stacked, the detachment commander dresses it back to four paces from the line of stacks and commands: *Form for shelter tents.*

The officers fall out, the first sergeant falls in on the right of the right guide; he becomes No. 1 and the right guide No. 2; file closers fall in on the left and are numbered, counting off if necessary.

1. *To the left (right) take shelter-tent intervals,* 2. ***MARCH,*** 3. *Detachment,* 4. ***HALT,*** 5. ***FRONT,*** 6. ***PITCH TENTS.***

At the command *march,* all face to the left and move off in succession; as the line is being extended, each man grasps with his left hand the right wrist of the man in front.

If intervals are taken to the right, each man grasps with his right hand the left wrist of the man in front.

At the command *halt,* given as the second man from the right has his interval, all halt, face to the front, dress to the right, and correct their intervals by moving to the left until the arms are fully extended.

At the command *front*, all drop their hands.

At the command *pitch tents*, each No. 2 moves back to four paces in rear of his No. 1; all unsling and open the blanket rolls and take out the shelter half, poles, and pins; No. 1 places one pin in the ground at the point where his right heel, kept in position until this time, was planted. Each then spreads his shelter half, triangle to the rear, flat upon the ground the tent is to occupy, No. 1's half on the right. The halves are then buttoned together. Each No. 1 joins his pole, inserts the top in the eyes of the halves, and holds the pole upright beside the pin placed in the ground; No. 2, using the pins in front, pins down the front corners of the tent on the line of pins, stretching the canvas taut; he then inserts a pin in the eye of the rope and drives the pin at such distance in front of the pole as to hold the rope taut. Both then go to the rear of the tent; No. 2 adjusts the pole and No. 1 drives the pins. The rest of the pins are then driven by both men, No. 1 working on the right.

As soon as the tent is pitched, each man arranges the contents of the blanket roll in the tent, and stands at attention in front of his own half on line with the front guy-rope pin.

The guy ropes, to have a uniform slope when the shelter tents are pitched, should all be of the same length.

DOUBLE SHELTER TENTS.

272. The double shelter tent is formed by buttoning together the square ends of two single tents. Two complete tents, except one pole, are used. Two guy ropes are used at each end, the guy pins being placed in front of the corner pins.

The double shelter tents are pitched by two squads; the men falling in on the left are numbered, counting off if necessary.

The detachment commander gives the same commands as before, inserting *double* before *shelter* in the first command, and before *tents* in the last command.

The commands are executed in the same manner as when pitching single shelter tents, with the following exceptions:

Only the odd-numbered squads grasp wrists; the even-numbered squads cover the odd at six paces distance.

The first sergeant places himself on the right of the right guide and with him pitches a single shelter tent.

Only the Nos. 1 of the front squads mark the line with the tent pin.

All the men spread their shelter halves on the ground the tent is to occupy. Those of the front squads are placed with the triangular ends to the front. All four halves are then buttoned together, first

the ridges and then the square ends. The front corners of the tent are pinned by the front-squad men, the odd numbers holding the poles, the even numbers driving the pins. The rear-squad men similarly pin the rear corners.

While the odd numbers steady the poles each even number of the front squads takes his pole and enters the tent, where, assisted by the even number of the rear squad, he adjusts the pole to the center eyes of the shelter halves in the following order: First, the lower half of the front tent; second, the lower half of the rear tent; third, the upper half of the front tent; fourth, the upper half of the rear tent. The guy ropes are then adjusted.

The tents having been pitched, the triangular ends are turned back, contents of the rolls arranged, and the men stand at *attention*, each opposite his own shelter half and facing out from the tent.

TO STRIKE SHELTER TENTS.

273. Everything having been removed from the tents:

1. *Strike tents*, 2. ***DOWN***, 3. *To the right* (*left*) *assemble*, 4. ***MARCH.***

At the first command the side pins are removed; No. 1 steadies the front pole, No. 2 the rear pole, and all remaining pins are removed.

At the second command, or last note of *the general*, the tents are lowered, blanket rolls packed and slung, and the men stand at *attention* in front of the places lately occupied by their tents and at their original places after extension.

At the fourth command they close in to the right and re-form detachment.

TO STRIKE COMMON, WALL, HOSPITAL, AND CONICAL WALL TENTS.

274. 1. *Strike tents*, 2. ***DOWN.***

The men first remove all pins except those of the four corner guy ropes, four quadrant guy ropes in case of the conical wall tent. The pins are neatly piled or placed in their receptacle.

One man removes each guy from its pin, and all hold the tent in a vertical position until the command *down* or the last note of *the general*, and then lower it to the indicated side.

The canvas is then folded, or rolled, and tied, the poles, or tripod and pole, fastened together, and the remaining pins collected.

TO FOLD TENTS.

275. *Wall tents.*—Spread the tent flat on its side and place all guys but two over on the canvas; fold the triangular ends over so as to make the canvas rectangular; fold both ends over so that they meet at the center, and then fold one end over on the other; fold the bottom and ridge over so that they meet at the center of the strip, and then fold one end over on the other.

Fold the fly into four folds, parallel to its length, then in a similar manner across its length, making a rectangle with dimensions about the same as the folded tent.

Place the fly on the tent, cross the two free guys, and tie them so that they pass over the ends and across the sides.

The hospital and common tent are folded in the same manner as the wall tent.

Conical wall tents.—Spread the tent flat with the door up; holding the ring vertical, fold the two edges in so they meet at the center, and again fold in the same manner; place the hood on one half and fold the other half over on it; turn wall over toward ring, fold coming at about middle of height of wall, two men working together, then roll from the ring down, placing knees on each fold to make bundle compact and flat.

Tie the bundle with the two free guys as in case of the wall tent.

GENERAL REMARKS.

276. As soon as the lines of company streets are established, the positions of the tents should be marked from the flank nearest the officers' tents by pins. The front pole of the wall and common tent and the door pins of the conical wall tents occupy the points so marked. The distance between pins may be determined by pacing or by a light cord with the distances marked upon it. These distances are: For wall tents, eight paces; common tents, six paces; conical wall tents, ten paces; hospital tents, twelve paces. The pins marking the position of the tents are, when practicable, set on a straight line, and the detachment officers verify and correct the alignment of such pins in the quickest and most convenient manner.

277. Wall pins are so driven as to slope slightly away from the tent; guy pins, so as to slope slightly toward the tent.

The centers of the storm guys are looped over the pole pins and the ends carried diagonally across the roof of the tent and looped over tent pins driven in line with the other guy pins.

278. Each tent, its fly, hood, poles, and tripod, should have the same number.

279. The hospital tent complete consists of one tent, 100 pounds; one fly, 32 pounds; one set of poles, 60 pounds; eighteen large and twenty-eight small pins, 20 pounds; total weight, 212 pounds. Its dimensions are: Length of ridge, 14 feet 4 inches; width, 14 feet 6 inches; height, 11 feet; height of wall, 4 feet 6 inches; packed, contains 6 cubic feet.

280. The conical wall tent complete consists of one tent and hood, 76 pounds; one tent pole and tripod, 32 pounds; forty-eight pins, about 20 pounds; total weight, 128 pounds. Its dimensions are: Diameter, 16½ feet; height, 10 feet; height of wall, 3 feet; packed, contains 13 cubic feet.

281. The wall tent complete consists of one tent, 43 pounds; one fly, 15 pounds; one set of poles, 25 pounds; ten large and eighteen small tent pins, about 15 pounds; total weight, 98 pounds. Its dimensions are: Length of ridge, 9 feet; width, 8 feet 11 inches; height, 8½ feet; height of wall, 3 feet 9 inches; packed, contains 6 cubic feet.

282. The common tent complete consists of one tent, 26 pounds; one set of poles, 15 pounds; twenty-four small tent pins, about 9 pounds; total weight, 50 pounds. Its dimensions are: Length of ridge, 6 feet 11 inches; width, 8 feet 4 inches; height, 6 feet 10 inches; height of wall, 2 feet.

283. The shelter tent equipment for each enlisted man consists of the following:

(*a*) One shelter half, weight 3 pounds.

(*b*) One pole in three joints, 47 inches long; weight, 10½ ounces.

(*c*) Five tent pins, 9 inches long; weight, 10 ounces.

The shelter tent is pitched by two men, whose combined equipments make a complete tent. The tent, when pitched, occupies a space 5 feet 4 inches deep and 6 feet 4 inches wide; the two triangular parts, when pinned to the ground, inclose an additional triangular ground space 20 inches deep.

284. In striking tents, common and wall tents are, unless otherwise directed, lowered to the right, facing out from the tent door; conical wall tents, away from the door.

SCHEME FOR PITCHING FIELD HOSPITAL.

285. Field hospitals will usually be pitched in accordance with the following plan. Because of conformation of site, lack of sufficient space, or temporary status of the camp, it may at times be desirable to modify the plan, or to reduce the distances between tents.

The operating tent may often be better located elsewhere, perhaps on the line A–C or Y–Z.

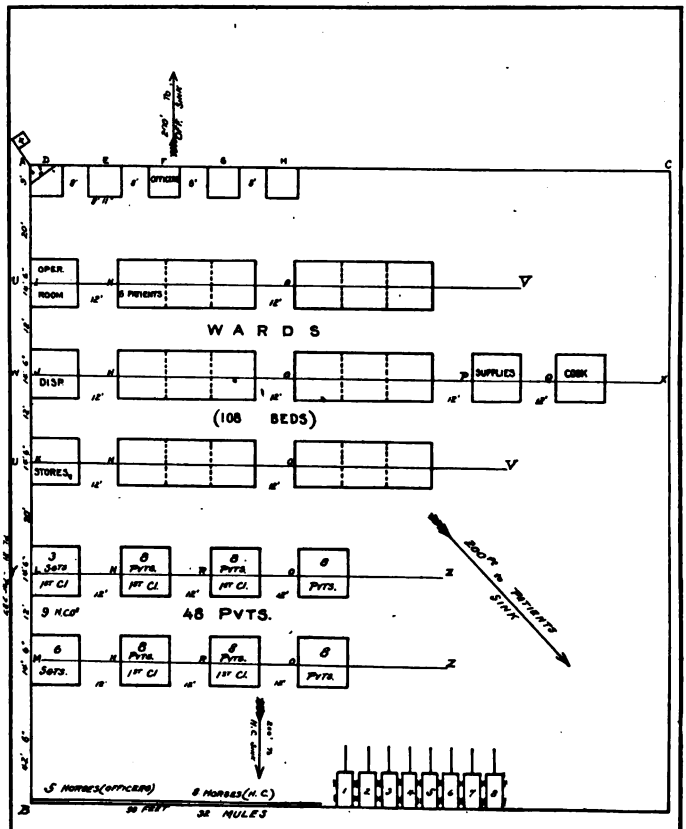
286. The location of the sinks and of the picket line and transportation will depend upon peculiarities of site, prevailing winds, etc. Their distances from the tents should be those specified in the plans should circumstances permit.

TO MARK OUT THE CAMP.

287. The site having been chosen and base line (front) A–B decided upon, the hospital will be marked out as follows:

Mark the right end of the base line (base point) with a flag, or otherwise, A, and measure off with the 200-foot tape line the distance required, 200 feet, or 80 paces; mark the left end of the base line, B. Place a man on the base line 6 feet from A, and another man 8 feet from A toward the rear and 10 feet diagonally from the first man; the angle thus formed will be a right angle, and the 8-foot side of the triangle can be continued out to C with the 200-foot tape.

The rear line of the camp will be equal in length and parallel to the base line, and will be similarly marked. The tents will now be pitched. The position of the door of each tent should be marked by pins properly aligned; the positions of these pins may be deter-


OFFICERS
OPER. ROOM
6 PATIENTS
WARDS
DISP
SUPPLIES
COOK
(108 BEDS)
STORES
3 SGTS. 1ST CL
6 PVTS. 1ST CL
9 H.CO
48 PVTS.
6 SGTS.
200 FT. PATIENTS SINK
5 HORSES(OFFICERS)
6 HORSES(H.C)
30 FEET
32 MULES

Pl. 85, Par. 287.

mined by measuring with the tape as follows: Stretch tape[a] along line A–C; put pins at letters D, E, F, G, H, thus marking doors of the five officers' wall tents. Stretch tape along line A–B; put pins at letters I, J, K, L, M, marking doors to tents along front of camp. Stretch tape along line W–X, and put pins at N, O, P, Q, marking doors to center row of tents. Stretch tape along the two lines Y–Z; put pins at N, R, O, marking doors to H. C. tents. Stretch tape along the lines U–V, and put pins at N, O, to mark the doors of remaining wards. Any of the tents can now be pitched at leisure, as the center door pins are all in place.

Ordinarily, it will be found most convenient to pitch first the center line of tents, including the office and the kitchen. With these tents pitched, the work of the hospital can proceed while the remainder of the tents are being pitched and the camp put in order.

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[a] The 200-foot tape or a 200-foot rope should have the distances marked on it, shown in the following scale:

DISTANCES ON 200-FOOT TAPE.

A to B, 200 ft.	A to H, 72 ft. 1½ in.	A to N, 26 ft. 4 in.
A to C, 200 ft.	A to I, 36 ft. 3 in.	A to O, 81 ft. 4 in.
A to D, 4 ft. 5½ in.	A to J, 62 ft. 9 in.	A to P, 136 ft. 4 in.
A to E, 21 ft. 4½ in.	A to K, 89 ft. 3 in.	A to Q, 162 ft. 8 in.
A to F, 38 ft. 3½ in.	A to L, 123 ft. 9 in.	A to R, 52 ft. 8 in.
A to G, 55 ft. 2½ in.	A to M, 150 ft. 3 in.	

HONORS.

288. The national or regimental color or standard, uncased, passing a guard or other armed body will be saluted, the field music sounding "to the color" or "to the standard." Officers or enlisted men passing the uncased color will render the prescribed salute; with no arms in hand, the salute will be made by uncovering, the headdress being held in the right hand opposite the left shoulder, right forearm against the breast.

289. Whenever "The Star-Spangled Banner" is played by the band on a formal occasion at a military station, or at any place where persons belonging to the military service are present in their official capacity, all officers and enlisted men present will stand at attention, such position being retained until the last note of "The Star-Spangled Banner." The same respect will be observed toward the national air of any other country when it is played as a compliment to official representatives of such country.

290. At every military post or station the flag will be hoisted at the sounding of the first note of the reveille, or of the first note of the march, if a march be played before the reveille. The flag will be lowered at the sounding of the last note of the retreat, and while the flag is being lowered the band will play "The Star-Spangled Banner," or, if there be no band present, the field music will sound "to the color." When "to the color" is sounded by the field music while the flag is being lowered the same respect will be observed as when "The Star-Spangled Banner" is played by the band, and in either case officers and enlisted men out of ranks will face toward the flag, stand at attention, and render the prescribed salute at the last note of the music.

291. Troops under arms salute other armed bodies, the commanding officer, and his superiors; if halted in line, by presenting arms; if marching, eyes are turned in the direction of the person or body of troops saluted by the commands: 1. *Eyes*, 2. ***RIGHT (LEFT)***, 3. ***FRONT;*** the command *front* is given when the person or body is passed. The commander of the troops salutes.

When troops are in column at a halt, the commander alone salutes; the present or eyes right (left) is omitted.

Troops are brought to attention when a body or an officer entitled to a salute passes in rear.

Unarmed troops salute as prescribed for armed bodies, except that when halted the present is omitted.

The commander of a body of troops salutes, in person, his superior officers not mentioned above; other officers and men of the command do not salute; the present or eyes right (left) is omitted.

Troops are brought to attention, if not already there, before their commander salutes.

292. No honors are paid by troops when on the march or in trenches, except that they may be called to attention; no salute is rendered when marching in double time.

293. The commander of a body of troops is saluted by all officers junior in rank and by all enlisted men. The salute is returned by the commander only.

294. All officers salute on meeting and in making or receiving official reports. Military courtesy requires the junior to salute first, but when the salute is introductory to a report made at a military ceremony or formation to the representative of a common superior—as for example, to the adjutant, officer of the day, etc.—the officer making the report, whatever his rank, will salute first; when not otherwise prescribed in ceremonies, the officer to whom the report is made will acknowledge by saluting that he has received and understood the report. When under arms the salute is made with the saber if drawn; otherwise with the hand. A mounted officer dismounts before addressing a superior not mounted.

On official occasions, officers, when indoors and under arms, do not uncover, but salute with the saber if drawn; otherwise with the hand. If not under arms, they uncover and stand at attention, but do not salute except when making or receiving reports.

295. Enlisted men carrying rifles, not in ranks, when within saluting distance salute an officer with the rifle salute, look toward him and retain the left hand in position until the salute is acknowledged or he is passed.

If unarmed, the salute is made in a similar manner with the hand farthest from the officer; if mounted, the salute is made with the right hand.

If approaching an officer the salute begins when six paces from him.

Indoors and armed with a rifle, the salute is made from the position of the order or trail.

Officers are saluted whether in uniform or not.

296. An enlisted man, if seated, rises on the approach of an officer, faces toward him and salutes. If standing, he faces the

officer for the same purpose. If the parties remian in the same place or on the same ground, such compliments need not be repeated. Soldiers actually at work do not cease work to salute an officer unless addressed by him.

297. An enlisted man makes the prescribed salute with the weapon he is armed with, or if unarmed, whether covered or uncovered, with the hand, before addressing an officer. He also makes the same salute after receiving a reply.

298. All salutes, in passing or approaching are begun first by the junior at six paces distance, or, at six paces from the nearest point of passing; no salutes, except as otherwise prescribed, are made at greater distances than thirty paces.

299. Indoors, an unarmed enlisted man uncovers and stands at attention upon the approach of an officer; he does not salute unless he addresses or is addressed by the officer. If armed, he salutes as heretofore prescribed, without uncovering.

300. When an officer enters a room where there are soldiers, the word *attention* is given by some one who perceives him, when all rise and remain standing in the position of a soldier until the officer laves the room. Soldiers at meals do not rise.

301. Officers at all times acknowledge the courtesies of junior officers and enlisted men by returning their salutes. When several officers in company are saluted, all who are entitled to the salute return it.

302. Officers arriving at the headquarters of a military command, or at a military post, call upon the commander thereof as soon as practicable and register their names. If the visiting officer be senior to the commander, the former may send a card, in which case it becomes the duty of the commander to make the first call.

303. Officers of the navy are saluted according to their relative rank; officers of marines and of the volunteer forces or militia in the service of the United States, and officers of foreign services, are saluted according to rank.

304. Honors, courtesies, and ceremonies not referred to herein, are found in Army Regulations and in the Manual of Guard Duty.

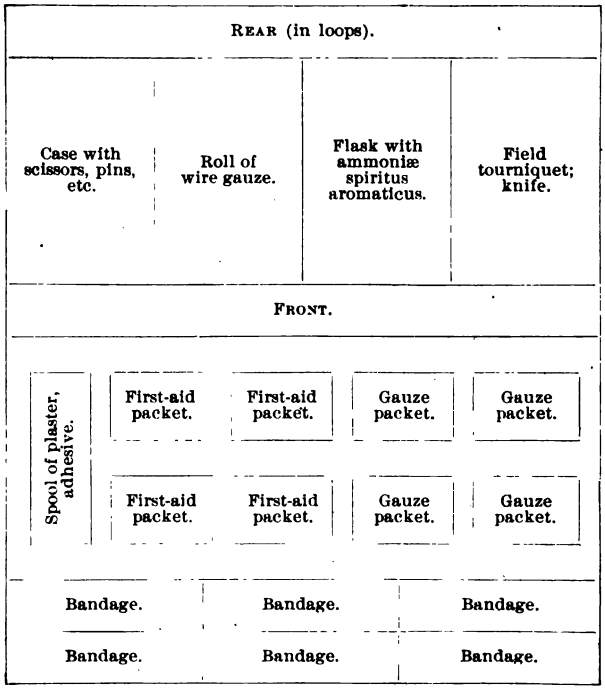
HOSPITAL CORPS BUGLE CALL.

305.

Pl. 86, Par. 305.

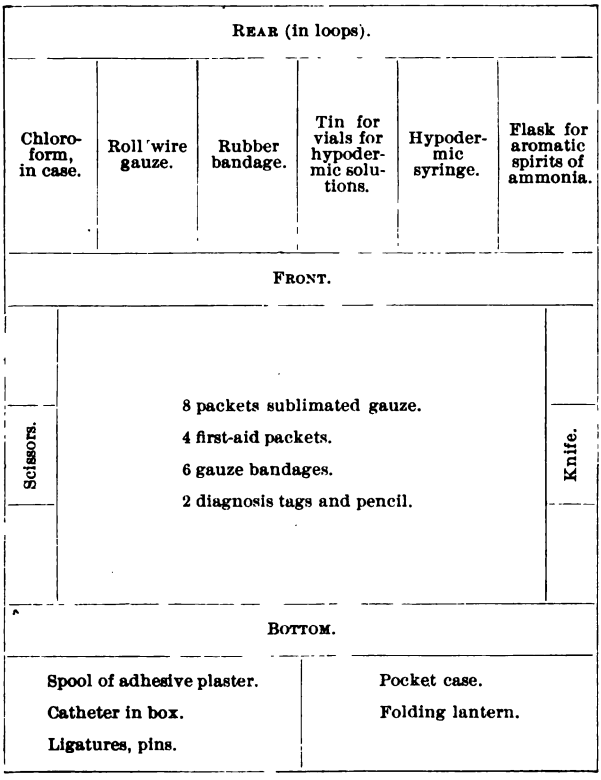
306.

SCHEME FOR PACKING HOSPITAL CORPS POUCH.



307.

SCHEME FOR PACKING ORDERLY POUCH.



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OUTLINES OF FIRST AID.

308. As most of the first-aid work in war under present conditions will be done by the individual soldier acting alone, and not by a squad of two or more men, it is important that his training should be largely individual and such as will develop self-reliance and resourcefulness.

The object of any teaching upon first aid, or early assistance of the injured or sick, is not only to enable one person to help another, but in some measure to help himself. The purpose of these directions is to show how this may be done with simple means and by simple methods. It is a mistake to think that you must know many things to be helpful, but you must understand a few things clearly in order to assist the patient in the severer cases until he can be seen by the surgeon or those who are thoroughly trained. In ordinary cases what you can do may often be all that is necessary.

These short instructions are intended for application anywhere—at a military post, in camp, or under any circumstances of ordinary life; but as the wounds received in battle are the most important to the soldier, it is the more necessary that he should know what to expect there and what to do for himself and others. Most of these wounds are made by the rifle ball, fewer by shell or shrapnel, while those made by the saber and bayonet come last in frequency.

WOUNDS.

The first-aid packet.

309. When a ball enters or goes through the muscles or soft parts of the body alone, generally nothing need be done except to protect the wound or wounds with the contents of the first-aid packet, used as follows:

1. If there is one wound carefully remove the paper from one of the two packages without unfolding compress or bandage and hold by grasping the outside folds between the thumb and fingers.

When ready to dress wound open compress by pulling on the two side folds of bandage, being careful not to touch the inside of the compress with the fingers or anything else.

Still holding one roll of the bandage in each hand apply the compress to the wound and wrap the ends of the bandage around the limb or part until near the ends, when the ends may be tied together or fastened with the safety pins. The second compress and bandage may be applied over the first or may, if the arm is wounded, be used for a sling.

2. If there are two wounds opposite each other, use one compress opened out but with the folded bandage on the back, for one wound and hold it in place by the bandage of the compress used to cover the other wound.

3. If there are two wounds not opposite each other apply a compress to each.

4. If the wound is too large to be covered by the compress, find and break the stitch holding the compress together, unfold it and apply as directed above.

Be careful not to touch the wound with your fingers nor handle it in any way, for the dirt on your hands is harmful, and you must disturb a wound as little as possible. Never wash the wound except under the orders of a medical officer.

The bandaging will stop ordinary bleeding.

Generally this is all that is necessary for the first treatment, and sometimes it is all that is needed for several days. The importance of the care with which this first dressing is made can not be too seriously insisted upon. It is better to leave a wound undressed than to dress it carelessly or ignorantly, so that the dressing must soon be removed.

Bandages and Slings.

310. In addition to the slings made with the bandages two forms of slings provided by the ordinary clothing are shown here. (Pls. 87 and 88.)

Bleeding from Wounds.

311. Now and then a wound will bleed very freely, because a large blood vessel has been wounded; and you must know how to stop the bleeding, or hemorrhage, as it is called. Remember that all wounds bleed a little, but that, as a rule, this bleeding will stop in a few minutes if the patient is quiet, and that the firm pressure of the pads and bandage will keep it controlled. Occasionally, but not often, something else must be done.

Looking upon the heart as a pump, you will understand that to stop the current of blood pumped through the arteries you must press upon the blood vessel between the wound and the heart. This

Pl. 87 Par. 310. SLEEVE AS SLING.

Pl. 88, Par. 310. FLAP OF COAT AS SLING.

pressure stops the current of blood in the same way that you would stop the flow of water in a leaky rubber hose or tube by pressing upon it between the leak and the pump, or other source of power. The points or places where you can best do this for the different parts of the body are illustrated in the figures. These points are chosen for pressure because the blood vessels which you wish to control there lie over a bone against which effective pressure can be made.

POINTS FOR COMPRESSION WITH THUMB AND FINGERS.

312. The temporal artery is reached by pressure in front of the ear just above where the lower jaw can be felt working in its socket. A branch of this artery crosses the temple on a line from the upper border of the ear to above the eyebrow.

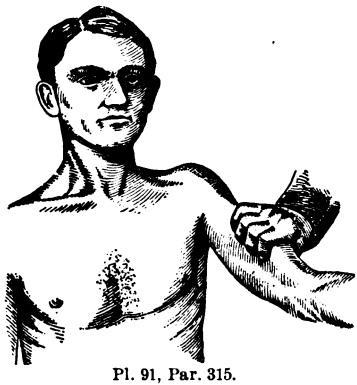
313. The carotid artery may be compressed by pressing the thumb and fingers deeply into the neck in front of the strongly marked muscle which reaches from behind the ear to the upper part of the breastbone. Pl. 89 shows pressure on the carotid of the left side.

Pl. 89, Par. 313.

314. In bleeding from wounds of the shoulder or armpit the subclavian artery may be reached by pressing the thumb deeply into the hollow behind the middle of the collar bone, Pl. 90.

Pl. 90, Par. 314.

315. In bleeding from any part of the arm or hand the brachial artery should be pressed outward against the bone just behind the inner border of the large muscle of the arm, Pl. 91.



Pl. 91, Par. 315.

316. In bleeding from the thigh, leg, or foot, press backward with the thumbs on the femoral artery at the middle of the groin where the artery passes over the bone. The point is a little higher up than that indicated in Pl. 92.

Pl. 92, Par. 316.

317. There are two other simple means for helping to stop bleeding—such as elevating or holding an arm or leg upright when these parts are wounded, and by applying cold to the wound; but you will find the compress and bandage, or the pressure made by your fingers, as described, to be most useful in the great majority of cases.

318. When, however, the bleeding continues after you have used these simpler means, or your fingers become tired in making the pressure, which they may do after ten or fifteen minutes, you will have to use what is called a "tourniquet," and generally will be obliged to improvise one out of material at hand. The principle of such a tourniquet is easily understood—a pad or compress placed on the line of the artery and a strap or band to go over the pad and around the limb, so that, when tightened, it will press the pad upon the artery and interrupt the flow of blood.

In the arm, apply the tourniquet over the point shown for compression by the fingers; in the thigh 4 or 5 inches below the groin, as it can not be applied higher up. (See Pls. 93 and 94).

The pad or compress may be made of such an object as a cork or smooth round stone wrapped in some material to make it less rough, a bandage, a handkerchief or a cravat being used for the strap. After tying the band closely around the limb, any degree of pressure may be made by passing a stick, bayonet, or something of that kind of sufficient length, and twisting or turning it around so that the pad is pressed firmly in place.

IMPROVISED TOURNIQUET.

Pl. 93, Par. 318.

Turn the stick slowly and stop at once when the blood ceases to flow, fixing the stick in place with another bandage. Remember that you may do harm in two ways in using this rough tourniquet: First, by bruising the flesh and muscles if you use too much force; and second, by keeping this pressure up too long and thus strangling the limb. It is a good rule to relax or ease up on this or any other tourniquet at the end of an hour, and allow it to remain loose, but in place, if no bleeding appears. By watching you can tighten the tourniquet at any time if necessary.

IMPROVISED TOURNIQUET.

Pl. 94, Par. 318

FRACTURES.

319. The next injury you must know how to help is a broken bone. The lower extremities, thigh and leg, are more frequently wounded than the upper, arm and forearm; and so you will find more fractures of the thigh and leg bones than of the bones of the arm and forearm. You will usually know when one of these long bones is broken by the way the arm or leg is held, for the wounded man loses power of control over the limb, and it is no longer firm and straight. What you must do is much the same in all cases—straighten the limb gently, pulling upon the end of it firmly and quietly when this is necessary, and fix or retain it in position by such splints or other material as you may have. This is called "setting" the bone. If you have none of the splint material supplied, many common materials will do for immediate and temporary use—a shingle or piece of board, a carbine boot, a scabbard, a tin gutter or rain spout cut and fitted to the limb, a bunch of twigs, etc. Whatever material you choose must be well padded upon the side next to the limb, and afterwards secured or bound firmly in place, care being taken never to place the bandage over the fracture, but always above and below. Some of these methods are shown in the following figures.

Pl. 95, Par. 320.

Pl. 96, Par. 321.

320. *Fracture of the arm.*—Apply two splints, one in front, the other behind, if the lower part of the bone is broken; or to the inner and outer sides if the fracture is in the middle or upper part; support by sling, as in Pl. 95.

Pl. 97, Par. 322.

321. *Fracture of the forearm.*—Place the forearm across the breast; thumb up, and apply a splint to the outer surface extending to the wrist, and to the inner surface, extending to the tips of the fingers, support by sling, as in Pl. 96.

Pl. 98, Par. 322.

Pl. 99, Par. 322.

322. *Fracture of the thigh.*—Apply a long splint, reaching from the armpit to beyond the foot, on the outside and a short splint on the inside (Pl. 97). The military rifle may be used as an outside splint, but its application needs care. A blanket rolled into two rolls, forming a trough for the limb, is useful.

The carbine boot may be used to advantage in splinting fractures of the thigh and leg, as illustrated in Pls. 98 and 99.

Pl. 100, Par. 323.

323. *Fracture of the leg.*—Apply two splints, one on the outside, the other on the inside, of the limb. When nothing better can be had, support may be given by a roll of clothing and two sticks, as shown in Pl. 100.

Pl. 101. Par. 323.

Many surgeons think that the method of fixing the wounded leg to its fellow, and of binding the arm to the body, is the best plan for the field, as the quickest and as serving the immediate purpose.

The object of all this is to prevent, as far as possible, any motion of the broken bone, and so limit the injury to the neighboring muscles, and to lessen the pain.

Be very careful always to handle a broken limb gently. Do not turn or twist it more than is necessary to get it straight, but secure it quickly and firmly in one of the ways shown, and so make the patient comfortable for carriage to the dressing station or hospital. Time is not to be wasted in complicated dressings.

OTHER WOUNDS.

324. There are, of course, many wounds of the head, face, and of the body, but for the most part you will have little to do with these except to protect the wound itself with the contents of the first-aid packet, or, if bleeding makes it necessary, use, in addition, several of the packet compresses to control it. As the surface blood vessels of the head and face lie over the bones and close to them, it will generally not be difficult to stop the bleeding by this means or by pressure with the fingers, as already shown. Remember, as you were told, to make the pressure between the heart and the bleeding point.

With wounds about the body, the chest, and abdomen, you must not meddle, except to protect them, when possible without much handling, with the materials of the packet.

CAUTIONS.

325. You have already been warned to be gentle in the treatment of the wounded, and the necessity for not touching the wound must be always in your mind; but there are some other general directions which you will do well to remember:

1. Act quickly but quietly.
2. Make the patient sit down or lie down.
3. See an injury clearly before treating it.
4. Do not remove more clothing than is necessary to examine the injury, and keep the patient warm with covering, if needed. Always rip or, if you can not rip, cut the clothing from the injured part, and pull nothing off.
5. Give alcoholic stimulants cautiously and slowly, and only when necessary. Hot drinks will often suffice when obtainable.
6. Keep from the patient all persons not actually needed to help him.

THE DIAGNOSIS TAG.

326. The diagnosis tag is very important in preventing unnecessary handling of the wounded man and interference with his dressings on the field. When available, it is to be attached by the person who applies the first dressing, and is not to be removed until the patient reaches the field hospital. When a patient has a tag on, it is to be carefully read before additional treatment is given, and will usually indicate that no further treatment is needed before reaching the hospital.

OTHER ACCIDENTS AND INJURIES.

327. There are a few other conditions about which you should be informed, although they are not peculiar to military life, the first two only being related to wounds.

POISONED WOUNDS.

328. When a wound is known to be poisoned, such as one infected by the venom of a snake or a rabid animal, the treatment should be directed toward preventing the passage of the poison into the circulation. In snake bites the poison acts quickly. To prevent its absorption a bandage should be carried around the limb between the wound and the heart, tight enough to compress the veins; then get the poison out of the wound by laying it open and sucking the poison out (if there is no crack in the mouth or lips), and destroying what is left by cauterization with fire or caustic. Stimulants may be freely given if the heart is weak.

In the bite of a rabid animal the poison is for a long time localized in the wound, and there is no danger of immediate absorption. Do not use a tourniquet, but use the other local measures advised for snake bite.

SHOCK.

329. By this term is meant a very severe physical and mental depression following extensive wounds, such as those produced by shell, and ordinary wounds in which the chest and abdomen are entered. You can hardly mistake this condition, for it resembles approaching death. If possible, the patient should not be moved, but kept in position where found, warmed and carefully stimulated. This will be difficult, perhaps impossible, on the battlefield, but it should be attempted unless removal is unavoidable.

FAINTING.

330. This condition is generally the result of severe bleeding or exhaustion from fatigue. The patient should be laid upon his back, head lowered, arms by the side, feet extended, and should be carefully stimulated. This condition is rarely dangerous.

The other important accidents or conditions with which you may have to deal are poisoning, drowning, sunstroke, heat exhaustion, burns, and freezing.

POISONING.

331. Poisoning by way of the stomach may result from swallowing mineral or vegetable poisons. In the military service it often follows the taking of food which has undergone changes resulting in the production of poisons—ptomaines, etc.

Whenever there is no evidence of caustic action, such as burns on the mouth, an effort should be made to empty the stomach and bowels by the free use of emetics and laxatives, such as mustard and warm water, two teaspoonfuls; a tablespoonful of salt in a glass of warm water; epsom or rochelle salts; castor oil, etc. After the poison has been evacuated, give stimulants and apply heat and rubbing externally.

When the lips are burned, give no emetic; give olive oil, cottonseed oil, or castor oil, internally, and also the proper antidote if you know it.

DROWNING.

332. Being under water for four or five minutes is generally fatal, but you should always make an effort to revive the apparently drowned unless it is known that the body has been under the water for a long time.

Remove patient's coat and shirt; lay him on his face; clasp hands under his belly and raise him to drain water from lungs; place him on his back, with a roll under his shoulders; clean out his mouth and nose; pull his tongue forward and hold it with a dry handkerchief. To expand the chest, kneel at his head, grasp an arm just below the elbow with each hand; draw his arms outward and then upward to the sides of the head (Pl. 102).

To drive air from the chest, bring patient's arms down along sides and front of chest, pressing on them (Pl. 103). Alternate these movements about fifteen times per minute until natural respiration begins, or for at least one hour. Occasionally hold ammonia to his nose and slap his chest with a cold wet cloth. While these movements are being made, remove his lower garments and dry the surface, rubbing toward the body. As soon as patient is able to swallow, give stimulants carefully and warm fluid nourishment.

Pl. 102, Par. 332. First Movement, Inspiration—Sylvester's Method.

Pl. 103, Par. 332, Second Movement, Expiration—Sylvester's Method.

SUNSTROKE.

333. Sunstroke or heatstroke occurs in persons exposed to high temperature, either in or out of the sun. The face is flushed, skin hot and dry, breathing labored, pulse rapid, heat of body great. The patient may be unconscious. Place him in the shade, loosen clothing, and try to lessen heat of body by cold applications to the head and surface generally.

The heat may also cause, especially when soldier is much fatigued, a form of exhaustion without insensibility. Rest on the back in the shade, with cold applications to the head, and a little aromatic spirits of ammonia are usually sufficient to relieve.

In rare cases this exhaustion may go on to threatened collapse, with cold skin and extremities, pale face, and very weak pulse. Here alcoholic stimulants and heat to the body become necessary.

It is well to be warned that both sunstroke and heat exhaustion are common and severe among drinkers and the intemperate.

BURNS.

334. Do not pull the clothing from the burnt part, but rip or cut it off. Do not break the blisters, nor prick them, even if large. Protect a burn quickly with a mixture of equal parts of linseed or olive oil and lime water, if you have them, or with the plain oil, covering the whole with lint or cotton wool. Put nothing on a burn that will be difficult to remove afterwards.

FREEZING AND FROSTBITE.

335. The part frozen, which looks white or bluish white, and is cold, should be very slowly raised in temperature by careful rubbing with snow or ice and water, in a cool place and never near a fire. Stimulants are to be given cautiously when the patient can swallow, and followed by small amounts of warm liquid nourishment. The object is to restore the circulation of the blood and the natural warmth gradually and not violently. Care and patience are necessary to do this.

TRANSPORTATION.

336. The carriage of patients for moderate distances on or from the field is best done with the service litter, and when that can not be procured, by some improvised substitute which secures the comfort and safety of the person disabled. These methods, and those by one or more bearers, are fully described in the preceding paragraphs and are not repeated here.

DEIMER'S FIRST-AID RULES (MODIFIED).

337. 1. Never touch a wound with anything unclean—dirty fingers, nondisinfected bandages, dirty water, etc. It may cause inflammation, ulceration, or blood poisoning.

2. Expose the wound by removing the covering article of dress, which contains many impurities. Unbutton or cut clothes and examine extent of bleeding. Open all articles of clothing which might hinder circulation of blood or breathing (collar, necktie, belt). To avoid pain and bleeding, raise legs by putting under them a valise, saddle, truss of straw, etc.; slight bleeding will often cease in this position of its own accord, without any bandaging. A bandage is advisable to protect the wound from dirt, flies, or cold. USE THE FIRST-AID PACKET. Coats, pouches, haversacks, etc., may be used as pillows.

3. If the wound does not bleed at all, or only a few drops at a time, no constriction or pressure is necessary.

4. If the blood is spurting or in a strong stream from a wound, you must use measures to stop it.

5. Whoever is able to walk after being wounded must repair at once to the dressing station. Those who can not walk must be carried by stretcher bearers, and must await their arrival by lying down as quietly and as comfortably as possible, in order to avoid pain, bleeding, and aggravation of the wound.

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